

THE CREATION OF A JOB-SPECIFIC
SCREENING INSTRUMENT TO
DETECT WORKPLACE
ILLITERACY

by

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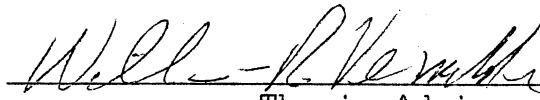
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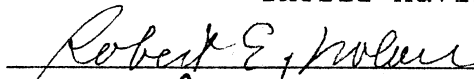
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Thesis Approved:


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Dean of the Graduate College

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CHAPTER I

INTRODUCTION

There is an increasing gap between the basic skill level of the workforce and the skills which will be required by business and industry in the next decade. In order to upgrade the basic skills of the existing workforce, workers who lack these skills must be identified and programs delivered to provide those skills.

Statement of the Problem

The specific problem with which this study deals is that of creating an effective and legal means of identifying workers who lack basic skills.

Identification is a complex issue. The majority of employees needing basic skill training will not voluntarily admit their problem and seek help. They fear losing their jobs. They are embarrassed by their deficiencies. They perceive the risks of admission are too great.

Because most employees hide their deficiencies and do not request help, employers are faced with finding alternative means of identifying these workers. The obvious method is through basic skills testing. These testing procedures must be both cost effective and legal. Standardized basic skills

tests are available. However, the courts have found these tests unsuitable for identifying deficiencies in workplace basic skills unless they actually reflect the reading, writing, reasoning and computational demands of the job. Procedures for validating these standardized tests for workplace specific usage are time-consuming and therefore expensive.

Need for the Study

A survey by the Tulsa Metropolitan Chamber of Commerce in 1987 indicated that responding managers perceived at least 1.5 percent of the workers they currently supervised as lacking basic skills for their job. Responding managers perceived that 2.1 percent of their current employees did not have adequate skills to be trained or retrained for a higher level position. These statistics were far below the national predictions of the United States Department of Labor. One possible cause for this discrepancy was identified as the managers' inability to identify workers lacking adequate basic skills for a specific job.

A cost effective and legally acceptable method for managers to identify workers lacking basic skills was needed.

Purpose of the Study

The purpose of this study was to develop a method to identify workers lacking basic skills for a specific job. The

method must present a statistically significant relationship between the screening instrument results and the results of a standardized adult functional literacy test to insure that basic skill deficiencies are being identified. The method must be job-specific to meet Equal Employment Opportunity Standards. The method must be cost effective when compared with standardized methods of testing, assuming that a legal standardized testing instrument can be found.

Scope

This study included 96 subjects who were managers or employees from the Storm Water Management Department of the City of Tulsa, Oklahoma, and from the Department of Maintenance and Plant Operations of St. John's Hospital in Tulsa, Oklahoma.

Assumptions

For the purpose of this study, the following assumptions were made:

- 1.) Materials selected by managers to prepare the screening instrument were materials actually used in day to day functioning in that job.
- 2.) Each participant did his best to answer all items on both tests.
- 3.) The answers were true measures of the participant's own ability.

Limitations

This study was limited by:

- a.) the size of the sample;
- b.) the fact that all participants were male;
- c.) the voluntary nature of the testing; and
- d.) the lack of specific diagnostic information.

A more detailed discussion of the limitations may be found in Chapter V.

Definition of Terms

The following terms are defined for the purposes of this study:

Functional Literacy - The ability to read, write, compute and reason at a level which allows an individual to operate in society, achieve individual goals and develop knowledge and potential. Because functional literacy involves individual goals and potential, it cannot be assigned a single specific grade level. However, it is generally accepted that to operate in society, a 4.0 grade level in reading and mathematical operations is necessary to function.

Workplace Literacy - The ability to read, write, compute, and reason at a level necessary for a specific job or position. Workplace literacy in this study considers only basic skills, although it is understood that workplace literacy is a continuum of

skills beginning with basic skills and continuing through task specific skills for a specific job or position. Because each job is unique, a grade level for reading or mathematics cannot and should not be assigned.

Basic Skills - Minimal acceptable academic skills associated with reading, writing, computing, and reasoning. For the purposes of this study, basic skills will equate to functional literacy.

Workplace Literacy Screening Instrument - An instrument developed by or under the supervision of a supervisor which includes written materials taken from the specific job. This instrument is not intended as a standardized test.

Standardized Test - A test which has proven objectivity, reliability, validity, specification of conditions of administration, directions for scoring, guidelines for interpretations and tables of norms presenting raw scores and one or more equivalent transformations.

Basic Skills Enhancement Program - A program or delivery system to upgrade reading, writing, computation, and reasoning skills. Basic skills enhancement programs usually deal with academic skills from pre-reading through the 12th grade reading level.

Summary

The introductory chapter presents a statement of the problem surrounding the identification of workers who lack basic skills. The need for the study was outlined. The purpose of the study was to create a cost-effective and legally acceptable method to identify workers lacking basic skills for a given position. The scope of the study included 96 managers and employees from one department of the City of Tulsa, Oklahoma, and one department from St. John's Hospital, Tulsa, Oklahoma. Assumptions and limitations were outlined.

Chapter II contains a review of literature pertaining to workplace illiteracy and the identification of workplace illiterate employees. Chapter III explains the methodology used in conducting the study, including the population, data collection, and analysis of the data. Chapter IV describes the findings of the study as well as the statistical analysis of the test data. Chapter V contains the summary of the study, conclusions, recommendations and the implications of the study.

CHAPTER II

REVIEW OF THE LITERATURE

The Changing Level of Workplace Literacy

The workforce will change dramatically in the next 11 years. The decline in population growth will boost the average age of a worker in the year 2000 to 39, the oldest in history. Forty-two percent of the new workers entering the workforce will be white female. By 2000, 61 percent of all working-age women will be employed. Immigrants will make up 22 percent of all new workers entering the workforce. Predictions indicate that only 15 percent of the new entrants into the workforce over the next 13 years will be white males, compared to 47 percent in that category today.

The minority segment of new entrants, 41 percent, traditionally have less education and fewer skills than other employees. Current high school drop out rates are 13.6 percent of all 18 to 21 year olds. The rate among blacks is 17.5 percent. The rate among Hispanics is 29.3 percent (Business Week Special Report, 1988, p. 100).

However, the educational level required to occupy jobs in the workforce will increase. The current median educational level is 12.6 years of schooling. By 2000, it will increase

to 13.5 years (Countdown 2000, 1988, p. 4). Service industries will create all of the new jobs and most of the new wealth over the next 13 years (U.S. Department of Labor, 1987, np). Manufacturing will no longer be the basis of the United States' economy. The estimated half life of a job skill will drop from a range of seven to 14 years today to a range of three to four years in 2000 (Countdown 2000, 1988, p. 4).

The composition of the workforce in the year 2000 and the demands for increasing skills make it apparent that something must be done to upgrade the basic skills of adults currently in the workforce. There will not be enough new workers entering the workforce to fill the new jobs that will be created. The existing workforce must provide manpower for these jobs.

The Problem of Workplace Illiteracy

The level of illiteracy of the workforce has become a nationally recognized problem. The United States Department of Education estimates that 14 percent of the people currently employed are functionally illiterate. Seventy-five percent of the unemployed workforce do not have enough basic skills to be employed (Countdown 2000, 1988, p. 2).

At the same time, the Learning Skills Center at the University of Indiana reports that 90 percent of all jobs require two to three hours of reading or writing per day.

Seventy percent of job-related reading is between the ninth and 12th grade difficulty level. On the average, 87 percent of the reading on the job is about how to do the job; 60 percent is judgment-related (Countdown 2000, 1988, p. 11).

The Need for Workplace Literacy Assessment

The American Management Association's management briefing, "Workplace Literacy" (Skagen, 1986, np), and "Reading Between the Lines: The High Cost of Ignorance" (Schoultz, 1986, p. 44) indicated a need for literacy programs and the identification of workers, but no research or methods were discussed.

Illiterate America and Prisoners of Silence by Jonathan Kozol, and reports such as "Workforce 2000: Work and Workers for the 21st Century" by William B. Johnston, United States Department of Labor, indicated the need for literate workers to meet workplace standards, but no methods for identifying workers with deficient skills were described.

One method already available for identifying deficient skills is standardized adult literacy tests. These tests are available from many national testing services. While in operation, The Adult Performance Level Project (University of Texas at Austin) conducted research regarding reading and functional literacy tests. During that time, a review of 14 representative tests was made available upon request. The administration time required for the reviewed tests ranged

from 30 minutes to three and one-half hours. Ten of the listed tests could be administered in a group setting. Seven of the listed tests offered machine scoring as an option. None listed the return time for machine scoring or the estimated time required for manual scoring (Reading and Functional Literacy Tests, 1987, np).

From the employer's point of view, even a standardized test requiring 30 minutes for administration equates to the loss of 1/16th of a work day for every employee tested and to the loss of considerably more time by one or more employees in administering, scoring, and interpreting test results. In the workforce, time is money and the amount of time involved in screening employees is critically important.

Additionally, employers are severely limited in the type of testing they can administer to employees for employment and promotion purposes. The Equal Employment Opportunities Commission in 1966 set out guidelines regarding employee testing procedures. Their direction was specific. Testing must be non-discriminatory and job-related. A specific standardized test may meet these criteria for one job but not for another. In order to prove that a standardized test conforms to EEO guidelines, the test has to be validated for each job. This insures that the test measures only skills that are necessary for that particular job, and does not include bias toward race, creed, color, or ethnic background. The procedure for validating a standardized test for a

specific job is so complex that most companies have chosen to abandon standardized testing programs.

The alternative to standardized testing programs is to create in-house, job-specific assessment instruments to detect the lack of employee basic skills. Although this method is acceptable legally, few companies have staff with adequate skill or knowledge to develop these instruments.

Articles from the Business Council for Effective Literacy Newsletter during the period 1984 through 1988 referenced the need for diagnostic or assessment tools, and indicated that standardized grade level tests are not appropriate. Topics addressed for effective adult literacy programs included diagnostic testing (BCEL, April, 1986, p.3). Mention was made that large corporations are developing in-house programs and materials, including a full set of diagnostic and assessment tools (BCEL, January, 1986, p. 6). In fact, a company has been established to provide technical assistance for employers to analyze basic skill requirements of jobs and groups of jobs and to assess skill levels of employees performing those jobs (BCEL, July, 1988, p. 10).

In August 1987, the State of Michigan began extensive research in the area of adult literacy. The Adult Literacy Task Force submitted its final report and recommendations to the governor in March 1988. The fourth recommendation was to

develop a standard skill assessment tool
for measuring Michigan's work readiness
goal and definition to use with each
participant in all training and education

programs. The assessment will be used to determine incoming skill levels (and thus the appropriate mix of services required), progress toward completion, and in measuring effectiveness of programs (Countdown 2000, 1988, p.33).

This tool was described as one which can be used by employers and training services, as well as by policy boards. Reference was made to modifying work currently being done by the Basic Employability Skills Task Force in the State of Michigan to provide the tool. The complete draft is targeted for completion in January 1989 with complete validation occurring in January 1990. However, there was no discussion regarding methodology, legality, or cost effectiveness.

The Selection of Research Methods

There are several recognized types of research appropriate for the disciplines of education and human resources. They include action research, descriptive research, historical research, developmental research, correlational research, causal-comparative research, quasi-experimental research, true experimental research, and theoretical model building (Miller and Barnett, 1986, p.7).

Correlational research is most appropriate when the purpose is to investigate variations in one factor which correspond to variations in another factor. It allows comparison of very complex variables which may not lend themselves to experimental research and controlled

manipulation. It also permits the measurement of several variables and their interrelationships simultaneously and in a realistic setting. Correlational research reveals degrees of relationship rather than direct relationship. There are limitations of correlational research. It does not reveal cause and effect relationships. It is less rigorous than true experimental research and is prone to identification of relational patterns which may have little or no validity (Miller and Barnett, 1986, p.11). The correlation coefficient is a statistic that measures the degree to which two variables are linearly related to one another (Jaccard, 1983, p. 254). There are several types of correlation statistics available. The Pearson correlation was selected as the statistical procedure to be used for this study.

The Pearson product-moment correlation coefficient is used to analyze the relationship between two quantitative variables. Each variable must be measured on approximately an interval level and the observations on a given variable must be independent (Jaccard, 1983, p. 254).

The Creation of Testing Instruments

Standardized tests provide objectivity, validity and reliability, and specify conditions of administration to insure that results obtained from the test can be generalized to other samples. Training in measurement and evaluation is necessary to insure quality in the

instrument, if the instrument is to be standardized (Gay, 1981).

In creating testing instruments, issues such as validity, reliability, and test administration must be addressed. Validity is the degree to which a test measures what it was created to measure. Types of validity include content validity, construct validity, concurrent validity, and predictive validity. Content validity is determined by expert judgment. There is no formula to compute it or way to express it quantitatively (Gay, 1981, p. 112). In test construction, the selection of experts to insure content validity is critical. Construct validity measures the degree to which a test measures a hypothetical construct. It frequently requires a number of independent studies to establish the credibility of a test as a construct. Concurrent validity measures the degree to which scores on one test are related to scores on another already established test. This type of validity is established by correlation between the two tests. Predictive validity is the degree to which a test can predict how well an individual will do in a future situation. This is particularly important for tests that will be used to classify or select individuals. Of prime importance in predictive validity is the selection and definition of the criterion used to measure the behavior. This type of

validity is also established by the correlation of two sets of scores.

Reliability relates to consistency of measurement. It can be measured in a variety of ways including test-retest, equivalent forms, split-half, rationale equivalence, scorer/rater, reliability coefficients, and standard error of measurement. Of these, the first three deal with correlational data. Test-retest describes consistency of scores over time. Equivalent forms reliability is appropriate where various forms of the same test are being standardized. Split-half reliability deals with internal consistency, and presumes that the entire test is measuring the same construct (Gay, 1981, p. 116). The standard error of measurement is an estimation of how often errors of a given size can be expected. Small standard errors of measurement indicate high reliability.

Test administration is related to scorer/rater reliability and to duplication of testing conditions. Tests which can be performed independently by the participant help lessen chances of scorer/rater influence. Tests that have items which do not require subjective interpretation by the scorer/rater also increase reliability in the instrument (Gay, 1981, p. 122).

Because standardized testing is not acceptable for purposes of employment or promotion, standardized tests can not be used as the method of identifying workers lacking

basic skills. Instruments have to be developed for each specific job. The development of job-specific screening instruments is time consuming. The primary concern in the development is content reliability. Other measures of validity and reliability are inappropriate for the screening instrument because it cannot be standardized and comply with EEO guidelines.

In summary, the literature regarding workplace literacy assessments at the time this study was conducted had not established methodology. The need for job-specific assessment was discussed, as was the changing skill level required by the workforce, and the current levels of workplace literacy. Methodologies appropriate for research of this type were reviewed. Correlational research was identified as appropriate for describing the relationship of one factor to another when multi-variable conditions exist. Literature regarding the construction of test instruments indicated the need for reliability, validity, and standardized administration methods for any standardized test, however these considerations are limited for the construction of non-standardized screening instruments.

Following the completion of the data collection for this study, two additional pertinent pieces of literature were published. The Bottom Line: Basic Skills in the Workplace discusses a literacy audit system, but states

that this audit should be "performed by an outside agency, consultant, or a trained human resources staff member..." (The Bottom Line, 1988, pg. 13). The article further states that the procedure "is not inexpensive" (The Bottom Line, 1988, pg. 13). The fifth step of the literacy audit is to build a test that asks questions relating specifically to the employee's job or job group. The methodology described is to use job related language and style with situations and formats in which the basic skills being tested actually occur. The article suggests that employees be asked to perform the tasks that simulate what they encounter on the job (The Bottom Line, 1988, pg.15).

The audioconference, "Workplace Literacy: Designing Effective Local Partnerships Involving Business and Education" discussed the need to integrate job skills and basic skills training. Dr. Thomas Sticht was asked to comment on the need to validate job-specific assessment tools. Dr. Sticht responded that the only reason to validate a job-specific assessment tool was to measure its predictive value. He suggested two possible methodologies for accomplishing the validation: 1). to administer a standardized test at the same time as the job-specific test and to do a statistical regression equation between the two; and 2.) to conduct item response testing by embedding items from standardized tests within the job-specific test

(Workplace Illiteracy Audioconference, Washington D.C.,
November 10, 1988, np).

CHAPTER III

METHODOLOGY

Population

The purpose of this was study was to develop a cost effective and legally acceptable method to identify workers lacking basic skills for a specific job.

The population for this study was composed of male managers and employees from St. John's Hospital Maintenance and Plant Operations Department and from the City of Tulsa Storm Water Management Department. The St. John's group consisted of 45 members. Eight managers comprised one group. The remaining participants held five different jobs or positions, and were placed in groups according to like job descriptions. These groups totalled 12, four, 11, five, and five, members respectively. The participants from the City of Tulsa Storm Water Management Department totalled 51, 10 of whom were managers. The remaining 41 participants were placed into seven groups formed by like job descriptions. These groups had memberships of seven, six, eight, eight, three, eight, and one. Specific information for each subject regarding age, race, and educational level were not available as these tests were

taken anonymously and turned in voluntarily. However, the ages of St. John's employees in the department ranged from 23 to 64. Ethnic groups represented at St. John's were black, Caucasian, American Indian, Hispanic, and Vietnamese. One employee from this group was totally deaf. The age ranges for employees in the Storm Water Management Department were 20 to 64. Ethnic groups represented by Storm Water Management were black, Caucasian, and American Indian.

Null Hypothesis

The null hypothesis was that there was no significant relationship in the results between a standardized adult functional literacy test and a job-specific screening instrument.

Description of the Instruments

Instruments used in data collection were workplace literacy screening instruments and a standardized adult functional literacy test.

A total of 14 different workplace literacy screening instruments were developed, one for each group tested. All screening instruments were comprised of 20 items. Screening instruments for the two groups of managers were developed by the researcher with assistance from the supervisor of each group of managers and reviewed for

content by the supervisor. Screening instruments for employees were developed by the manager for that specific job under the direction of the researcher and were reviewed for content by the researcher. Assuming that supervisors and managers were subject matter experts regarding written materials used in a given job, the content validity of each screening instrument was protected by utilizing these people to construct and review each screening instrument. Development time for the screening instruments created by the researcher required about two hours per instrument. Development time for screening instruments developed by managers required approximately one hour of training in a group situation and three hours of independent work on the part of the manager. Screening instruments were developed from forms, labels, and manuals used in each specific job. Mathematical operations were included where applicable. Types of items included in the screening instrument were matching, multiple choice, true and false, and fill in the blank. The content of items included vocabulary and reading comprehension. Four of the screening instruments were arbitrarily selected and reading levels were calculated. The readability index used was the Gunning F.O.G. index (Laubach, 1977, np). Reading levels ranged from grade level 5.8 to 9.6 with an average of 7.9.

After reviewing several possible standardized adult functional literacy tests, the Reading/Everyday Activities

in Life, Form A, was selected because of its high validity (Pearson product moment correlation with the Stanford Achievement Test was .74 {n=434} and standard error of measurement equal to 5.28) and because of the short administration time compared with other tests reviewed. The R/EAL used a reliability sample of 434 individuals ranging from 16 to 21 years of age. The group's average reading equivalency was 5.2 on the Stanford Achievement Test. The test manual states "Since the R/EAL was designed to assess mastery of the content representative of functional literacy, the usual procedures for establishment of norms are not followed" (Lichtman, 1978). The Gunning F.O.G. Index of readability was calculated for those sections of the R/EAL test which incorporated whole sentences in the text. The readability of the sections ranged from grade level 2.6 to 17.5 with an average of 8.9. The summary from the Adult Performance Level Project which discussed the R/EAL test listed the administration time as 20 to 30 minutes. Comparable tests listed administration times of between 45 and 110 minutes (Reading and Functional Literacy Tests, 1987, np).

Data Collection

Collection of data occurred from March 30, 1988 through June 2, 1988. All members of each group were tested at the same time. Both the workplace literacy screening

instrument and the standardized test were administered during the same testing period. The researcher administered both tests to each of the two groups of managers. Training for administering the standardized test was given to all managers. A script from the test manual was provided to protect against administrator bias. Each manager administered both tests to the employees under his supervision. In every setting, the standardized test was administered first, then the screening instrument. In every setting, the participants were presented with the written material from the standardized test. The test administrator read the questions from the printed script regarding the written material. The participants responded in writing per administration instructions. The screening instrument was designed so that the administrator was not required to read any of the items of the test to the participant. This strategy provided a safeguard against administrator coaching. It also required less total time for administration because the worker could work independently and at his own pace. In the case of the totally deaf subject, the standardized test was signed from the script by a volunteer from the Tulsa Speech and Hearing Clinic. Because the screening instrument required no aural interpretation, it was done independently by the deaf subject.

The standardized test required from 30 to 55 minutes to administer, depending on the group being tested. The R/EAL test does not require limited time to insure valid administration. However, because time is also a cost issue, the administration time was noted. The administration of the screening test required from seven to 15 minutes, depending on the group being tested.

After all testing had been completed, the researcher scored all tests. Scoring for the standardized test required from five to nine minutes per test. Scoring for the screening instrument required between one and three minutes per test. Scores for all the test were converted to percentages to allow comparison on approximately an interval level.

Analysis of the Data

Percentage test scores from the standardized tests and from the screening instruments were compiled. A computerized statistical analysis was conducted utilizing a general linear models procedure. The Pearson product-moment correlation coefficient was computed to analyze the relationship between two quantitative variables, the percentage scores of the screening instrument and the percentage scores of the standardized test. The correlation coefficient and a t score were calculated to determine predictability of the results of the standardized test

based on the scores of each screening instrument. The scores of three of the job-specific groups were also correlated. Scatterplots were generated for the percentage scores of all tests and for the percentage scores of each of three subgroups.

Summary

This chapter has included the procedures for the collection of the data in this study. The population was described. The null hypothesis was stated. The instruments used for the data collection were discussed. The time frame and method of data collection were outlined. The method of statistical analysis was described.

CHAPTER IV

FINDINGS

Correlation of the Screening Instrument to the Standardized Test

The purpose of this study was to develop a cost effective and legally acceptable method to identify workers lacking basic skills for a specific job.

The Pearson product-moment correlation coefficient was computed between the standardized test scores and the scores from the screening instrument. Analysis was first completed using the standardized test as the dependent variable. A second analysis was conducted using the screening instrument as the dependent variable. In both cases, the observed correlation of .7023 was statistically significant ($t = 9.56$, $DF = 94$, $P = .0001$). The following data were formulated by using the standardized test as the dependent variable in the formula for the slope of a linear regression. Because the screening instrument had no standardized score indicating a pass/fail point, the formula for linear regression was used to establish the percentage passing mark for the screening instrument. It was calculated to be 72.876 rounded to 73 using the

recommended score of 80 as the passing mark for the R/EAL standardized test. Figure 1 (page 28) is a scatterplot representing the scores. Correlations were also calculated for three subsets of scores. A subset of test scores of 8 managers was statistically significant with an observed correlation of .8842 ($t = 4.7338$, $DF = 6$, $P = .05$). (See Figure 2, page 29.) The correlation coefficient was calculated for a subset of scores of 11 line employees and proved statistically significant with a value of .7387 ($t = 2.3282$, $DF = 9$, $P = .05$). (See Figure 3, page 30.) A subset of scores for 12 line employees did not prove statistically significant with a correlation of .4105 ($t = .5845$, $DF = 10$, $P = .05$). (See Figure 4, page 31.)

Results of the Screening Test as Compared to the Standardized Test

Of the 96 sets of tests administered, 11 employees, or 11.46 percent of those tested, scored below the acceptable criterion of 80 for the R/EAL test. Ten employees, or 10.42 percent, scored below the acceptable criterion of 73 for the screening instrument. Table I (page 32) is a summary of pass/fail data. Eight of the employees tested scored below the satisfactory level on both tests. Three of the employees tested scored satisfactorily on the screening instrument but below the satisfactory criterion for the standardized test. Two of the employees tested

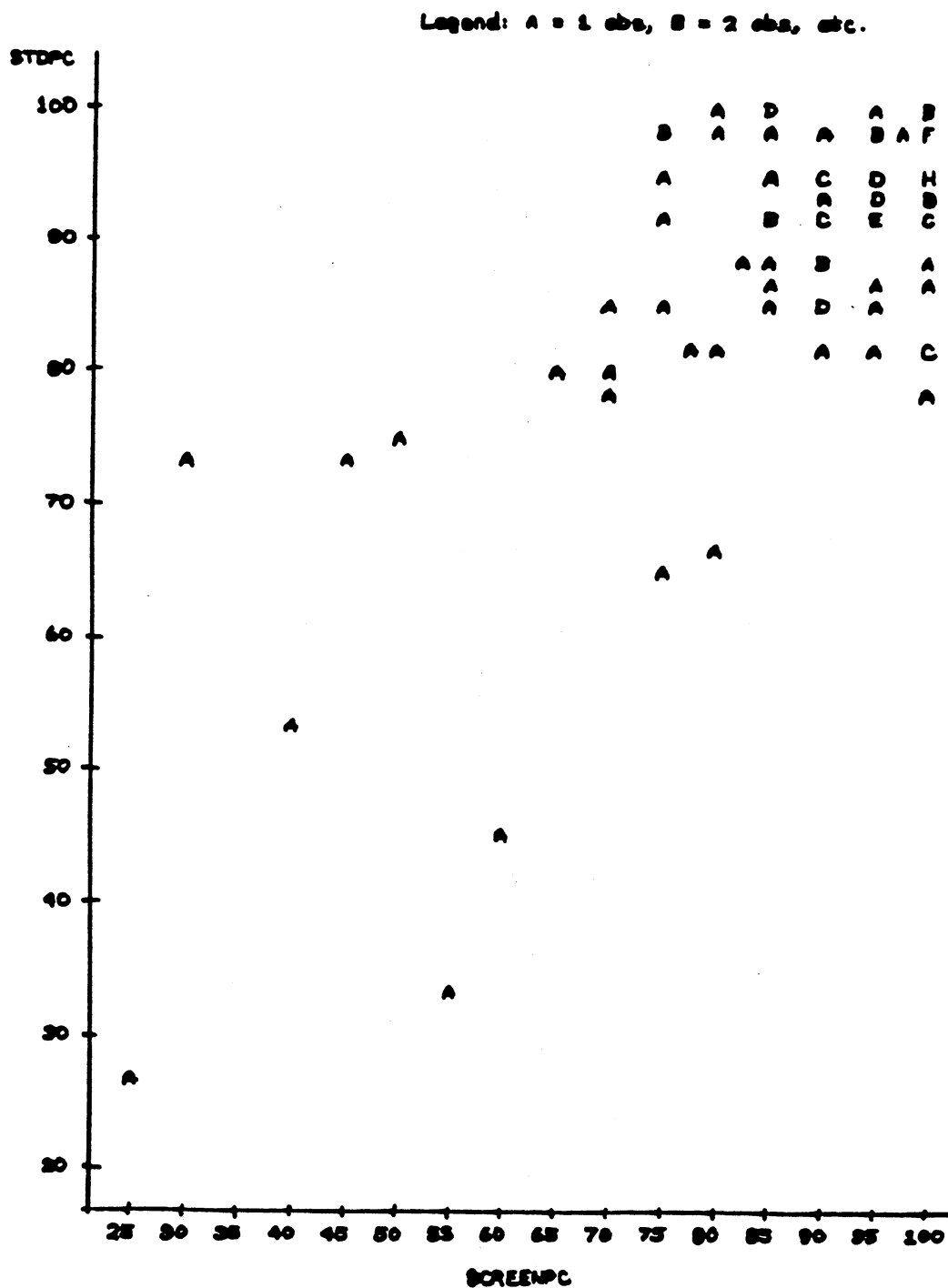


Figure 1. Scatterplot of R/EAL Test Scores in Relation to Job-specific Screening Instrument Scores for 96 Testees

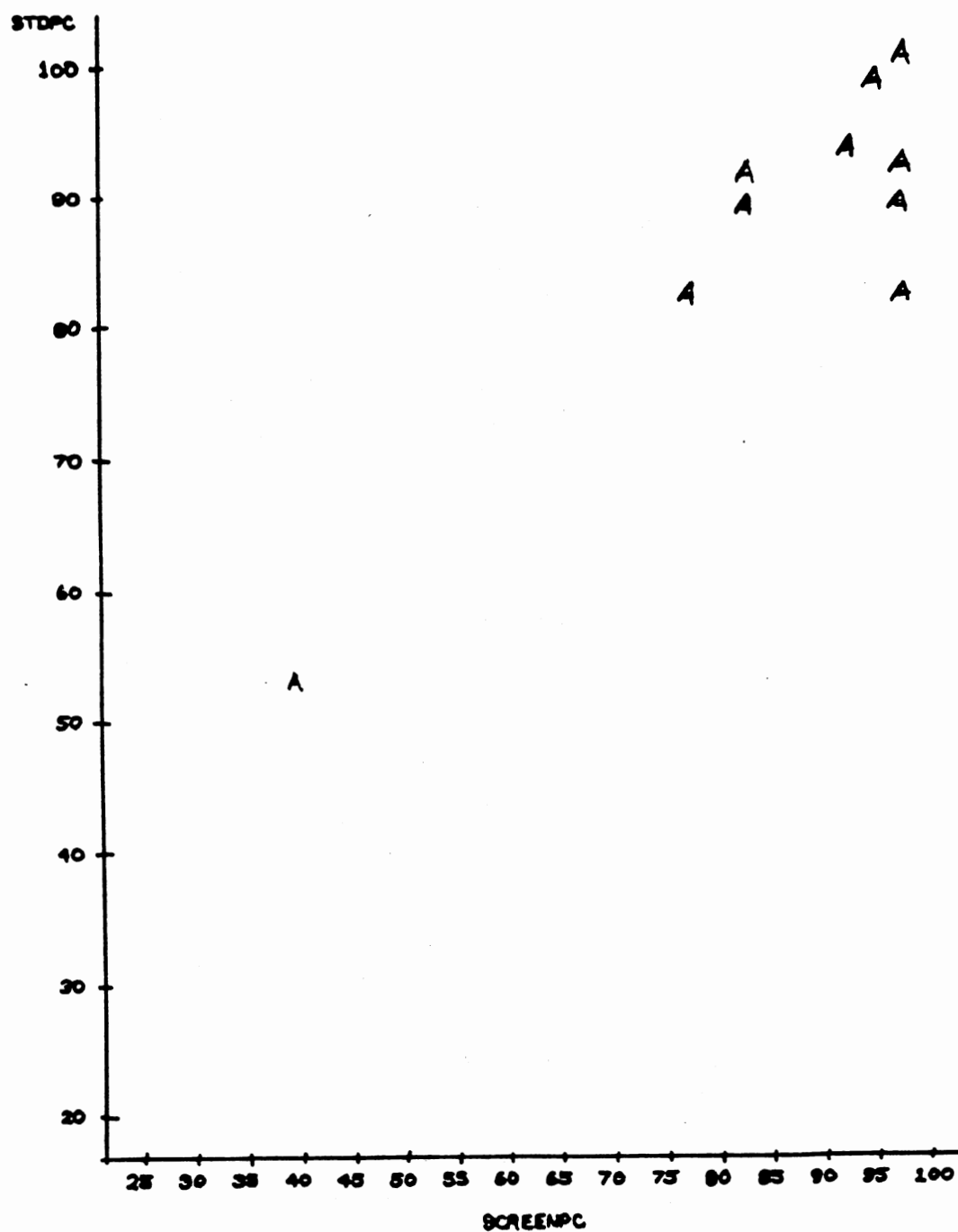


Figure 2. Scatterplot of R/EAL Test Scores in Relation to Job-specific Screening Instrument Scores for 10 Testees from a Manager Group

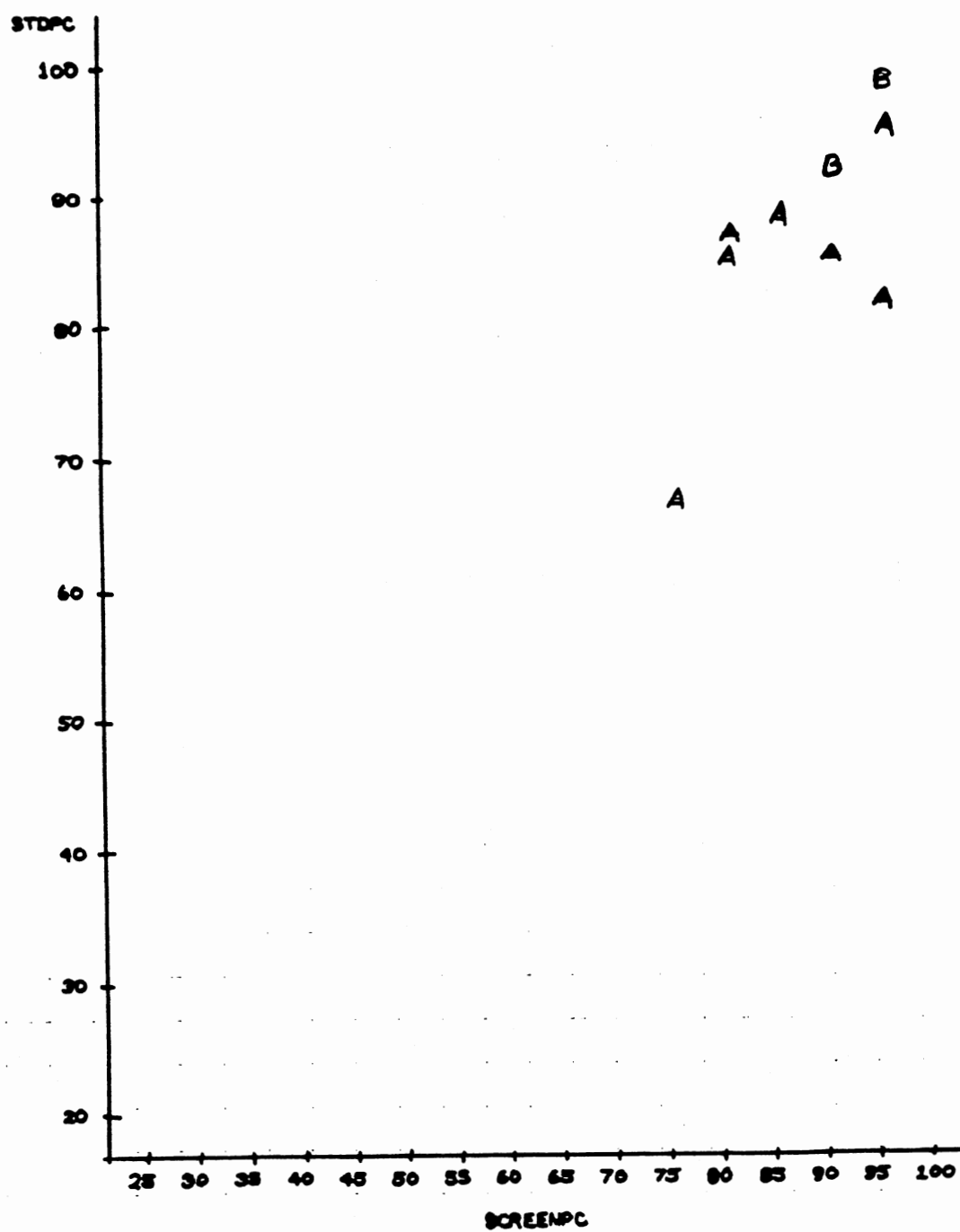


Figure 3. Scatterplot of R/EAL Test Scores in Relation to Job-specific Screening Instrument Scores for 11 Testees

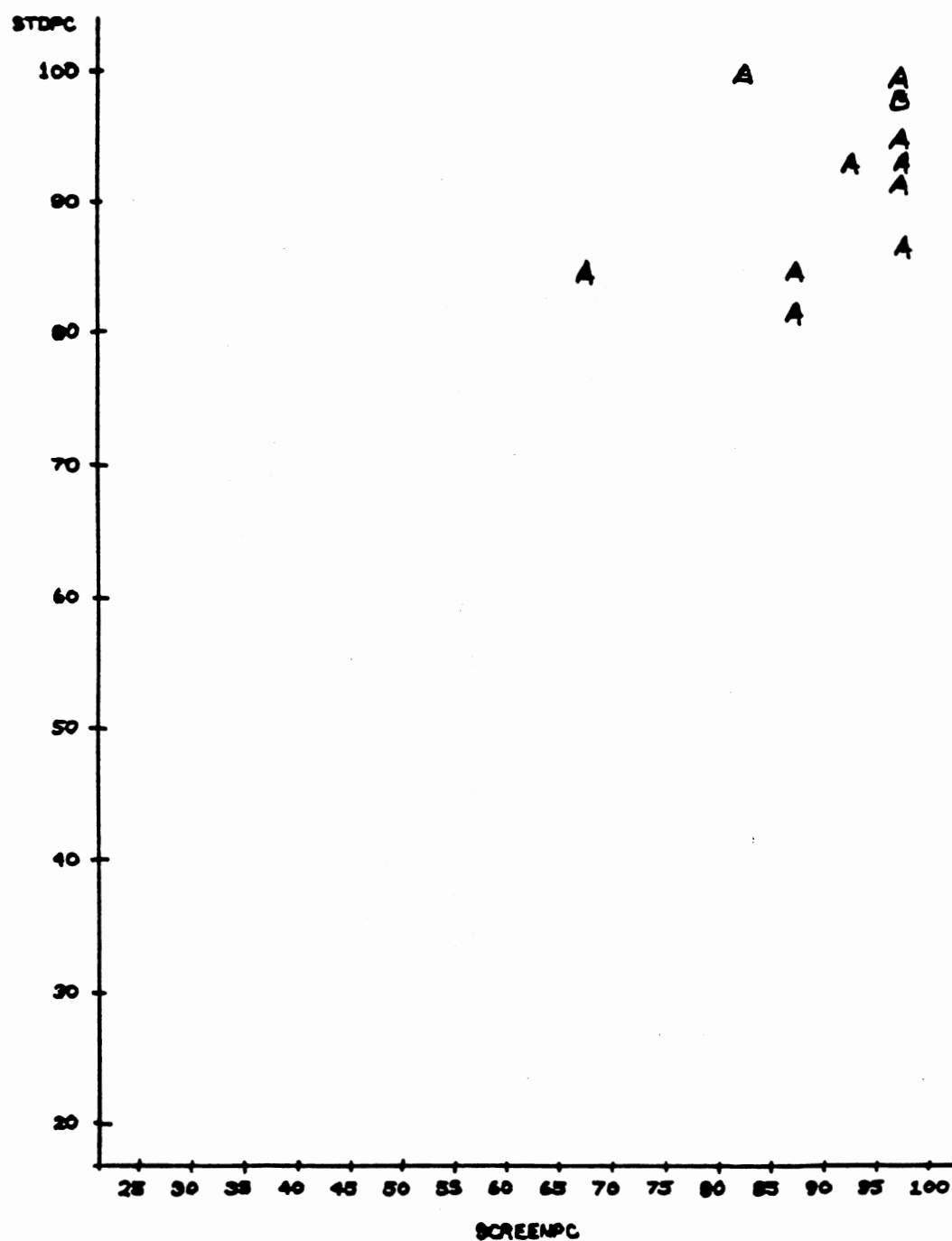


Figure 4. Scatterplot of R/EAL Test Scores in Relation to Job-specific Screening Instrument Scores for 12 Testees

TABLE I
SUMMARY OF GROUP PASS/FAIL DATA

NUMBER IN Group	TYPE	NUMBER PASSING SCREENING	PERCENT PASSING SCREENING	NUMBER PASSING R/EAL	PERCENT PASSING R/EAL
8	Manager	8	100	8	100
12	Employee	11	92	12	100
4	Employee	4	100	3	75
11	Employee	11	100	10	91
5	Employee	4	80	4	80
5	Employee	4	80	5	100
10	Manager	9	90	9	90
7	Employee	6	86	6	86
6	Employee	4	66	4	66
8	Employee	7	88	6	75
8	Employee	8	100	8	100
3	Employee	3	100	3	100
8	Employee	6	75	6	75
1	Employee	1	100	1	100
<hr/>		<hr/>		<hr/>	
96		86		85	

scored satisfactorily on the standardized test but below satisfactory on the screening instrument. Table II (page 34) represents these data.

The standard error of measurement for the screening instrument was calculated to be 2.75. The standard error of estimate reported for the reliability of the R\EAL test was 2.75.

Considering the standard error of measurement for each of the two tests, all of the employees who scored satisfactorily on the standardized test also scored satisfactorily on the screening test. Considering the standard error of measurement for both tests, one employee scored satisfactorily on the screening test but not the standardized test. Table III (page 35) depicts this analysis.

Summary

A statistically significant relationship ($r = .7023$, $t = 9.56$, $DF = 94$, $P = .0001$) was found between the screening instrument and the standardized R\EAL test. Two of three subtests also had statistically significant correlation coefficients. The third subgroup contained one set of scores which differed considerably. Due to the small sample size, this wide variance in scores could have strongly effected the correlation of this subset of scores. A disparity was found between the nationally estimated occurrence of workplace illiteracy and the occurrence

TABLE II
COMPARISON OF TEST RESULTS PER GROUP
WITHOUT CONSIDERATION OF THE STANDARD
ERROR OF MEASUREMENT

NUMBER IN GROUP	NUMBER PASSING BOTH SCREENING AND R/EAL	NUMBER FAILING BOTH SCREENING AND R/EAL	NUMBER PASSING SCREENING BUT NOT R/EAL	NUMBER PASSING R/EAL BUT NOT SCREENING
8	8	0	0	0
12	11	0	0	1
4	3	0	1	0
11	10	0	1	0
5	4	1	0	0
5	4	0	0	1
10	9	1	0	0
7	6	1	0	0
6	4	2	0	0
8	6	1	1	0
8	8	0	0	0
3	3	0	0	0
8	6	2	0	0
1	1	0	0	0
96	83	8	3	2

TABLE III
COMPARISON OF TEST RESULTS PER GROUP
WITH CONSIDERATION OF THE STANDARD
ERROR OF MEASUREMENT OF EACH TEST

NUMBER IN GROUP	NUMBER PASSING BOTH SCREENING AND R/EAL	NUMBER FAILING BOTH SCREENING AND R/EAL	NUMBER PASSING SCREENING BUT NOT R/EAL	NUMBER PASSING R/EAL BUT NOT SCREENING
8	8	0	0	0
12	12	0	0	0
4	4	0	0	0
11	10	0	1	0
5	4	1	0	0
5	5	0	0	0
10	9	1	0	0
7	6	1	0	0
6	4	2	0	0
8	6	2	0	0
8	8	0	0	0
3	3	0	0	0
8	6	2	0	0
1	1	0	0	0
96	86	9	1	0

within the tested population. However, this may be explained by the voluntary nature of the sample population. Considering the computed standard error of measurement for each test, only one employee did not display comparable scores on the two tests.

CHAPTER V

SUMMARY, DISCUSSION OF THE LIMITATIONS, DISCUSSION OF THE INTERPRETATION, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

Summary

The purpose of this study was to create a method of identifying workers lacking basic skills for a specific job. This method must be cost effective and in compliance with Equal Employment Opportunity guidelines. The results of this study are to be used to provide information regarding detection of basic skill deficiencies. They are also to be used to provide a practical model for the assessment of workers with basic skill deficiencies for private industry.

A review of current literature was conducted and, prior to the time the data for this study were collected, no literature was found which addressed methods of assessment for workplace literacy. Literature regarding selection of research methods and considerations for instrument construction were also reviewed. Following the data collection, two sources of pertinent information were

released. Both sources described procedures which reinforced the methodology utilized in this study.

Parallel testing was conducted with 96 subjects using a job-specific screening instrument and a standardized adult literacy test. The Pearson product-moment correlation coefficient was calculated to analyze the relationship between two quantitative variables.

Discussion of the Limitations

There were several limitations in the study. The most problematic was the low number of subjects on which the parallel testing was performed. The purpose of this study was to devise a legal and effective method of screening employees to detect basic skill deficits. To comply with the legal guidelines outlined by the Equal Employment Opportunities Commission, the screening instrument had to be job-specific. That restriction required the use of materials and language in each screening instrument that were specific to the position involved. It also implied that only employees who held a specific position or who were being considered for a specific position be given the test for such position. It specifically stated that the instrument could not be a standardized test unless validity and reliability had been established for that particular standardized test. The skills measured by the standardized

test had to measure exactly the basic skills necessary for that specific job.

Because validation and reliability require large samples or methods of repeated testing, standardization is impossible for many positions in the workforce. Frequently, not enough people hold a specific job within a corporation to provide the numbers of subjects required to standardize a job-specific test to measure basic skills. Dr. Thomas Sticht, President of Applied Behavioral & Cognitive Sciences, Inc., addressed the issue of the need to establish validity and reliability of job-specific instruments. He stated that validity and reliability should not be an issue unless the job-specific instrument is going to be used for predictive purposes.

The purpose of this study was not to predict the outcome of the standardized test based on the score of the job-specific test. The intent of this study was not to standardize the job-specific screening instrument. Therefore, proof of validity and reliability required for standardization of a measurement instrument were not central to the study. Face validity and content validity of the items included in the job-specific instrument were issues of concern. To insure that these criteria were met, managers and supervisors were involved in the construction of the items included in the screening instrument.

Because the purpose of this study was to devise an effective means to detect basic skill deficits of employees, some method had to be employed to substantiate the premise that the screening instruments were effective in detecting skill deficits. As cited in the above review of the literature, Sticht recommended one of two procedures to accomplish validity for predictability. The first was to administer both the job-specific screening instrument and a standardized test and calculate a regression equation. The second method was to embed items from standardized tests within the job-specific tests and calculate item response validity and reliability. Although the intent of this study was not to predict one score by using another score, the first method indicated by Sticht was selected because a statistical process allowing predictability also shows relationship. The task of this study was to discover if any relationship existed between the scores achieved on a job-specific screening instrument constructed to measure basic skill levels and a standardized test for functional literacy.

The conditions existing in the work place are not ideal for true statistical research. Statisticians argue that validity is a requirement for any measurement tool, but federal regulations regarding testing in the workplace specifically prohibit the use of standardized instruments. Even if federal regulation did not prohibit standardized

instruments, the numbers of subjects available for any given job could make validation an impossibility. The low number of subjects in this sample give adequate cause to question the statistical results in the realm of pure research and statistical application. However, there is an appropriate arena for this line of research (Stoker, 1988). Although the conditions of this study do not meet all the criteria for statistical significance, an attempt has been made to apply accurate and accepted research procedures to study an existing problem in the workplace. The correlation coefficients were statistically significant in three of the four linear regressions which were computed, although the statistical and predictive implications of these results could be improved if the numbers involved in the study had been greater.

A second limitation was the purely male population. The normative data for the standardized test were collected with a mixed gender population. Although the test documentation does not infer a difference in the scores of a singularly male population, a non-controlled variable was introduced into the study.

A third limitation of the research was the voluntary nature of the testing. The results of the tests indicated percentages of functional illiteracy that were significantly lower than the percentages predicted by the United States Department of Labor. Because this testing

was voluntary, it is reasonable to expect that some of those employees who refused to complete the assessments did so because they lacked the skills necessary to score favorably. The addition of those employees' scores may have more adequately predicted the real level of workplace illiteracy in the population.

A fourth limitation was that the test is not a criterion referenced screening instrument and therefore does not give diagnostic information about which skills may be deficient. This is a limitation of this method of assessment for workplace literacy. Because it is not diagnostic, workers cannot be placed in appropriate programs based on the test results.

Discussion of the Interpretation

It should be noted that it is possible to receive a passing score on one test and a failing score on the other test without inferring an error in either score. For example, if a job requires higher than basic skills, and the screening instrument reflects these job-specific skill levels, the standardized test could be passed easily while the screening instrument might be failed. Scores of this type would indicate that the worker had adequate basic skills but lacked academic skills sufficient for a the higher job-specific instrument. If a job requires lower than basic skills, and the screening instrument reflects

these job-specific skill levels, the standardized test could be failed while the screening instrument might be passed. In this example, the worker had competency at the level required by the job but insufficient skills to complete the standardized test.

If the purpose of the screening instrument is to identify workers who lack skills for their present job, the purpose would be accomplished because the instrument reflects the required skill level. If the purpose of the screening instrument is to detect workers who have insufficient basic skills, the score on the screening instrument could be misleading, if the specific job requires skills higher or lower than the level of basic skill. The difficulty is introduced if, in comparing the scores of the screening instrument and the standardized test, the scores are both expected to reflect a pass or a fail to be accurate. A passing score on one test and a failing score on the other test does not necessarily indicate an error in the score of either test.

Conclusions

The use of job-specific screening instruments created by managers is an effective and accurate way to identify workers who may be workplace illiterate. Although there were clear limitations to the research, the statistical analysis revealed that there were positive correlations

between the scores from the screening instrument and the scores from the standardized test in three of the four analyses conducted.

The population of this research included both managers and line workers. The job-specific screening instrument proved equally effective for both groups.

This method allows supervisors to create job-specific screening instruments which can be easily modified as job tasks change, making the instrument more practical in the rapidly changing job arena. The screening instrument can be administered quickly and easily. It can be administered in group settings or individually. It does not require the presence of a test administrator, except to insure that the instrument is completed independently by the worker. The screening instrument can be scored quickly and requires only a pass/fail interpretation of the results.

The actual test scores revealed that there was a significant number of workers in the groups tested who should be evaluated further for placement in a basic skills enhancement program.

Recommendations for Further Research

Because of the limitation of the sample size, further research should be conducted using the parallel testing model described in this study. The continuing research should be done with larger samples which include female

workers. This additional research should be conducted in various areas of the country to preclude geographic and/or cultural bias. Research should be conducted with various job types and with all levels of corporate structure from line employees through and including top management.

Research should also be expanded to investigate the use of the screening instrument as a diagnostic tool. Item analysis is one method which could be used to accomplish this. Although the supervisor would not be able to compile this information, an educational specialist could review each test and assign grade level equivalents to each test item. This would reduce the need for further assessment of the worker prior to basic skill program selection.

Recommendations for Practice

Although job-specific testing has been generally accepted as a requirement of employment, a legal opinion about the right of the employer to require participation in testing is still needed. If the testing can be required, it is anticipated that percentages of functional illiteracy will more closely approximate those predicted by the United States Department of Labor. If the legal opinion provides the right to an employer to require job-specific testing, further research could and should be conducted to include all employees from the participating company or department.

Because the screening method employed is not a diagnostic assessment, workers identified in this study as lacking basic skills should receive further evaluation to assess their current basic skill levels. If the assessment so indicates, they should be offered the opportunity to receive basic skills training in an appropriate program.

Implications

There are four major implications of this study. First is the issue of mandatory vs voluntary employee testing. This study was limited because participation was voluntary. The lower occurrence of workplace illiterate employees in this study could be attributed to its voluntary nature. Even the existing model programs for upgrading basic skills are being conducted on a voluntary basis. The true impact of basic skills training on productivity can only be estimated because those employees most severely limited in basic skills may not be participating in basic skill enhancement programs. The cost of upgrading basic skills may also be minimized as a result of voluntary participation. The true numbers of employees requiring training may not be known.

If productivity is to increase through workplace skill training for current employees, skill deficits for all employees must be identified. To accomplish this, testing must be mandatory rather than voluntary. This will require

that assessments be done at all job levels and in compliance with government guidelines. Mandatory testing is an issue which is not currently being addressed in the workplace. No initiative is being taken to explore the legal or financial ramifications of mandatory, job-specific testing for basic skills.

A legal opinion regarding the job-specific screening procedure should be provided. If it is proven to be within government guidelines, the issue of job skill competency and mandatory testing to prove that competency could become a workplace standard.

If job-specific testing becomes mandatory, all employees will be tested before every change in job requirements and before every job promotion. The financial ramifications of this amount of testing are unknown at this time. They are dependant on ease and speed of instrument development and the time required to take and score each instrument.

The second major implication of this study is that an effective way must be developed to deal with training and retraining. If testing becomes mandatory, each employee will have to be tested as job requirements change. Even if testing does not become mandatory, the constant skill changes required of the workforce, and the skill deficits revealed in the current workforce, outline a seemingly unending task in training and retraining the workforce.

Currently, business and industry do not have staff, facilities, or budgets to provide the quantity and quality of training required to keep the workforce productive. Systems for assessing job-specific basic skill requirements, assessing basic skills levels for employees, and providing programs for basic skill enhancement must be developed.

The third implication is that an effective method to create basic skill assessments needs to be devised. Workforce assessments need to be timely and reflect current skill needs. Input from professionals in both industry and education will be required to accomplish this task. Business and industry have a variety of professionals within their ranks. Two who have particular bearing on this study are the personnel expert and the line supervisor. Employees in personnel and human resource departments are often personnel specialists with expertise in areas such as wage benefits and Equal Employment Opportunity. Supervisors have expertise in the application of skills and technologies. However, business and industry do not have professionals in the area of adult skill assessment.

Adult educators have expertise in assessment. However, few are familiar with business and industry job-specific tasks and procedures. Adult educators possess the knowledge to create job-specific assessment instruments.

However, a considerable amount of time would have to be invested for the adult educator to independently learn the job skill thoroughly enough to create an assessment instrument. The development of each assessment tool would be time consuming and costly if the development was left entirely to the adult educator. This would make the project cost prohibitive to the majority of companies who need worker assessments.

For assessment instruments to be created, a partnership between the business professional and the educational professional must be established. The use of each professional, the supervisor and the educator, must be optimized to provide the most accurate and timely assessment tool possible. This study provides a working model for this partnership. It involves an adult educator training business people to construct basic skill assessment tools.

The concept of training employees to be trainers is not new, but the concept of training employees to be educators is new. The concept of educators creating academic assessments is not new, but the concept of educators creating skill assessments particular to a specific job task is new.

The fourth implication is that a partnership in program design and implementation must be created between business and industry and education. The blending of business and

educational skills is essential for the workforce to be upgraded. No single segment of society can tackle the problem alone.

A new workplace is evolving, a workplace which no longer separates business and adult education. It is a workplace which requires that adult educators become "workplace literate" regarding business and industry's goals and objectives. It is a workplace which requires that business and industry become "workplace literate" regarding the psychology and methodology of adult learning.

The establishment of this partnership will require energy. Business must provide opportunities for adult educators to learn about productivity and profitability. Educators must provide opportunities for business to see employees as people, as learners who can be motivated to improve themselves. Both business and education must research the connection between knowledge and productivity, and both must commit themselves to providing programs designed to establish that connection.

The linkage between business and education which was necessary to conduct this study, and the results generated by that linkage, are proof that the potential exists. It requires development and nurturing.

BIBLIOGRAPHY

Adult Performance Level Project. "Reading and Functional Literacy Tests". University of Texas at Austin: 1987.

Berlin, Gordon and Sum, Andrews. Toward a More Perfect Union: Basic Skills, Poor Families and Our Economic Future. (Occasional Paper Number Three, Ford Foundation Project on Social Welfare and the American Future). New York: Ford Foundation: 1988.

Berney, Karen. "Can Your Workers Read?". Nation's Business, pg.26: October 1988.

Business Council for Effective Literacy, "Colleges and Literacy". BCEL Newsletter, Number 11: April 1987

_____, "Effective Literacy Programs: A Practitioner's Guide"; Book Review, BCEL Newsletter, Volume 1, Number 7, pg.3: April 1986.

_____, "Polaroid Corporation". BCEL Newsletter, Corporate Literacy Action: Volume Number 1, Number 6, pg. 6: January 1986.

_____, "The New Technical Assistance for Employers". BCEL Newsletter, Corporate Literacy Action. Number 16, pg. 10: July 1988.

Business Week. "Needed: Human Capital". Special Report, pg 100: September 1988.

Carnevale, Anthony P.; Gainer, Leile J.; and Holland, Shari L. "Workplace Basics: The Skills Employers Want". Training and Development Journal, pg. 22: October 1988.

Carnevale, Anthony P. and Schulz, Eric R. "Technical Training in America: How Much and Who Gets It?". Training and Development Journal, pg. 22: November 1988.

Countdown 2000: Michigan's Action Plan for a Competitive Workforce. Governor's Cabinet Council on Human Investment, Adult Literacy Task Force: March 1988.

- Eurich, Nell P. "Corporate Classrooms, the Learning Business". The Carnegie Foundation for the Advancement of Teaching: 1985.
- Gay, L.R. Educational Research: Competencies for Analysis and Application. Charles E. Merrill Publishing Co.: 1981
- Geroy, Gary D. and Erwin, Michael G. "Assessing Literacy in the Workplace". Performance and Instruction, Volume 27, Number 5. National Society for Performance and Instruction: 1988.
- Hunter-St.John, Carmen and Harman, David. Adult Illiteracy in the United States. McGraw Hill: 1979.
- Jaccard, James. Statistics for the Behavioral Sciences. Wadsworth Publishing Co.: 1983.
- Jacobs, James. Training and Public Policy - Final Report. Industrial Technology Institute. Ann Arbor, Michigan: March 1987.
- Kozol, Jonathan. Illiterate America. Plume Books: 1985.
- Laubach, Robert S. and Koschnick, Kay. Using Readability Formulas for Easy Adult Materials. New Readers Press. Syracuse, New York: 1977
- Lee, Chris. "Basic Training in the Corporate Schoolhouse". Training, pg. 27: April 1988.
- Lichtman, Marilyn. "Reading/Everyday Activities in Life": Westwood Press, Inc.: 1978
- Mikulecky, Larry; Ehlinger, Jeanne; and Meenan, Avis L. "Training for Job Literacy Demands: What Research Applies to Practice". University Park, Pennsylvania: Institute for the Study of Adult Literacy, The Pennsylvania State University: 1987.
- Miller, David W. and Barnett, Samuel T. Doing Research In Human Resource Development. American Society for Training and Development: 1986.
- National Report on Human Resources. "Basic Skills Need Inside Backing". American Society for Training and Development: October 1988.

Schoultz, C.O.. "Reading Between the Lines: The High Cost of Ignorance". Training and Development Journal, pg. 44: September 1986.

Skagen, Anne. "Workplace Literacy". AMA Management Briefing: 1986.

Sticht, Thomas G. "Integrating Job Skills and Basic Skills Training". "Workplace Literacy: Designing Effective Local Partnerships Involving Business and Education"; National Audioconference. The National Academy for Vocational Education at the National Center for Research in Vocational Education, The Ohio State University: November 10, 1988.

Stoker, Linda. "Diagnosis and Assessment: How to Identify Worker's Skill Enhancement Needs While Preserving Their Dignity". "Workplace Literacy: Designing Effective Local Partnerships Involving Business and Education"; National Audioconference. The National Academy for Vocational Education at the National Center for Research in Vocational Education, The Ohio State University: November 10, 1988.

Telephone Interview. Cox Educational Services, Dallas, Texas: December 1988

The Bottom Line: Basic Skills in the Workplace. Washington, DC: U.S. Department of Labor and U.S. Department of Education: 1988.

Workforce 2000 Executive Summary; U.S. Department of Labor: 1987.

APPENDIXES

APPENDIX A

READING/EVERYDAY ACTIVITIES IN LIFE

TEST FORM A

SAMPLE QUESTIONS FROM THE ADMINISTRATION

MANUAL OF THE READING/EVERDAY

ACTIVITIES IN LIFE

TEST FORM A

The following questions are read aloud to the test participants from the test manual. The manual states that undo emphasis to any word or phrase should be avoided and that the script should be followed exactly as printed. The participant listens to the question, reads the material provided on the test sheet, and fills in the answer on the answer form.

Section One - Highway Signs

"What is the number of the sign that tells the divided highway ends?"

Section Two - Television Schedule

"What is the name of the earliest program on Thursday morning?"

Section Three - Cheese Pizza

"Give a title to the picture for step 2 of the directions."

Section Four - Drug Article

"What is one sign of true heroin addiction?"

Section Five - Food Ad

"Name three kinds of sausage sold at M & L Market."

Section Six - Lease

"According to the third paragraph, who pays the water bill for the apartment?"

Section Seven - Road Map

"What is the shortest road to take from Hudson to Milford?"

Section Eight - Help Wanted Ads

"What are the names of two companies that need car salesmen?"

Section Nine - Application Form

"Write in your full name."

R E A L

DATE _____

NAME: _____

COMPANY: _____

TEST NUMBER: _____

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Westwood Press Inc.
251 Park Avenue South
New York, NY 10010

FORM A

Ut wis non solud in indutial genelation.

RIVERDALE PLAZA
Kenilworth Ave. at Riverdale Rd.

FIRST RUN AREA SHOWING
"FRENCH
CONNECTION"
(R) at 7:35 and 9:30
Sat. Only-On Stage 12 and 2
"FLINTSTONE SHOW"
Flintstones, Yogi Bear, Boo Boo
Bear, Ranger Smith in person

Ectamen neude enim haec movere po
neccape eronvlar qe ille pallit anner

conso
pecu
quas
magi
facile
liear
Ectar
pecca
For n
in tar
Ectar
pecca
For n

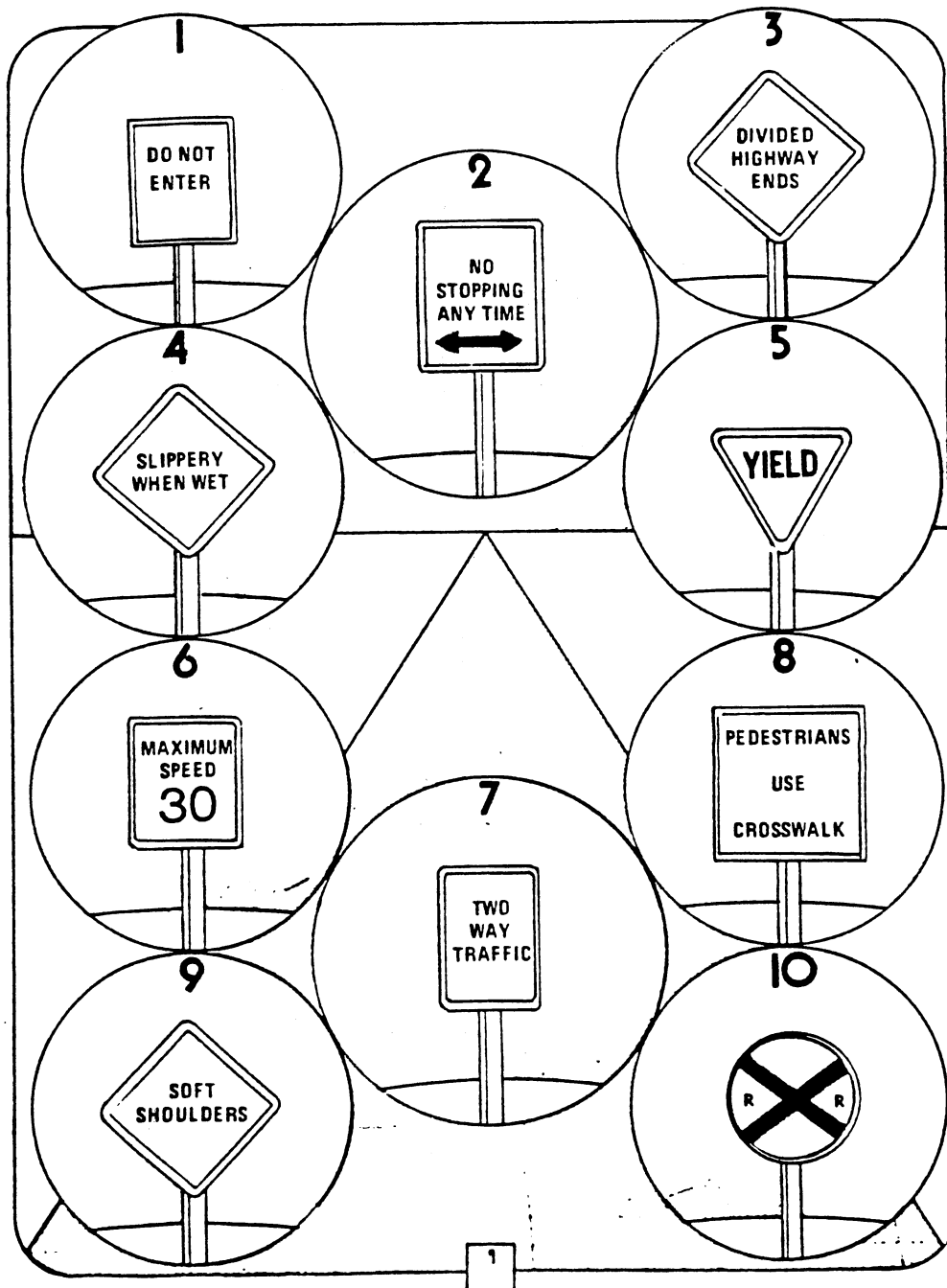
MOVIE AD

EMAPLE QUESTIONS

1. _____
2. _____

COMPLETED EXAMPLE

1. "French Connection or "Flintstone Show"
2. _____

ROAD SIGNS


TELEVISION SCHEDULE

	4 ^{WRC}	5 ^{WTTG}	7 ^{WMAZ}	9 ^{WTOP}	14 ^{WTAN}	20 ^{WDCA}	26 ^{WETA}	THURSDAY Oct. 7
EARLY A.M.	6:06 News 6:13 Faith 6:28 Ed. Ex. 7: Today	7: Cartoon 7:30 Party Pig (R) 8: Banana Split (R) 8:30 Martian (R)	6:40 A.M. Washington	6: Education 6:30 English 7: CBS News 8: Capt. Kangaroo		7: Astrology (R) 7:30 Basic Circus 8:30 George of the Jungle (R)		
9 :00	Movie "To Catch a Thief" (1955) stars	Futurama (R) Mr. Ed (R)	Magic Door	Harambee		Li'l Rascals (R) Leave It to Beaver (R)	Sesame Street	
10 :00	Cory Green Green Kelly Concentration	Hazel (R) Truth or Consequences (R)	What's My Line? Phil Donahue	Lucy Show (R) Beverly Hillbillies (R)		Romper Room Galloping Gourmet (R)	Imagine That Cover to Cover All About You Celebrate/Book	
11 :00	Sale-Century You Don't Say (R) Hollywood Squares	You Don't Say (R) Beat the Clock	That Girl (R)	Family Affair (R) Love of Life		Movie "Sweet the Summer" (1942) stars	Eureka Was Alive Parsons Francis	
12 :00	Jeopardy Who, What, Where Game	Panorama	Switched (R) Password	Where the Heart Is, News Search for Tomorrow		William Holden	Hatke Yaga Book Best	
1 :00	Duane's Place Three On a Match		All My Children Let's Make a Deal	News As the World Turns		Movie "Pardon My Past" (1947) stars	Western Civilization If You Live in a City	
2 :00	Days of Our Lives Doctors	Movie "Confession Girl" (1962) stars	Newlywed George Dating Game	Many Splendid Things Guiding Light		Fred MacMurray Bess (R)	Eureka Alive & About It's About Art	
3 :00	Another World Bright Promises	Yan Canway ... Banana Split & Friends (R)	General Hospital One Life to Live	Secret Storm Edge of Night		Ultraman (R) Spiderman (R)	From Nine to Five Celebrate/Book Other Team	
4 :00	Somerset Make Douglas w/Billy DeWolfe	I Dream of Jeannie (R) The Ghost & Mrs. Muir (R)	Movie "You've Never Too Young" (1965) stars	The Virginian (R)	Movie title unknown	Speed Racer (R) Lost in Space (R)	Sesame Street	
5 :00		Futurama (R) Peterson Junction (R)	Dean Martin Jerry Lewis	Dragonet (R)		Munsters (R)	Microscope Neighborhood Hodgepodge Lodge	
6 :00	News NBC News	I Love Lucy (R) The Mothers- In-Law (R)	News ABC News	News	D.C. Youth Questions Film	Bill Cosby (R) Get Smart (R)	Hans Christian Andersen Newsroom	
7 :00	News Lester	Dick Van Dyke (R) I Dream of Jeannie (R)	McCaffrey At Large	CBS News Sports Illustrated		Hogan's Heroes (R) Huck Chaparral (R)	Maryland Weekend Our Street	
8 :00	The Flip Wilson Show	Truth or Consequences David Frost	Alma Smith & Jones	Seemingly	World of Hypocrite Parables Far Am	Movie "The Agency & The Secretary" (1988) stars Charlton Heston Ben Harrison	Thirty Minutes with Washington Week Review	
9 :00	Nichols		Longstreet w/J. Francious	Movie "Butterfield 8" (1960) stars	Movie title unknown		Hollywood Television Theater "The Typists"	
10 :00	The Dean Martin Show	News	Owen Marshall Counselor at Law w/Arthur Hill	Elizabeth Taylor		Can You Top This?	Martin Agency Evening Edition Newsroom (R)	
11 :00	News Tonight	Perry Mason (R)	News Dick Cavett	News Wild Wild West (R)		NBA Highlights Movie "Sage of the Sea" (1948) stars Alexander Knox Susan Peters	The Advertiser (R)	
12 :00	1. Faith & Life	Outer Limits (R) 1. Your Life	1. Reflections	The Avenagers (R)			Newsroom Final	

CHEESE PIZZA

For making experience in mind

COMPLETE Cheese Pizza





STEP I

1. Preheat oven to 425° F.
2. Put pizza flour in a small bowl.
3. Add 1/2 cup very warm water to mix. Stir with fork until all flour particles are moistened. Then stir vigorously for 25 strokes.
4. Cover bowl. Let stand in warm place for 5 minutes.

STEP II

5. Using shortening, grease well a 14" pizza pan or a 11" x 14" rectangle on cookie sheet.
6. Grease fingers or dip them lightly in flour. Spread pizza dough to edges of pan. Pinch up edges 1/4" to form rim.
7. Pour canned pizza sauce over dough. Spread to edges.

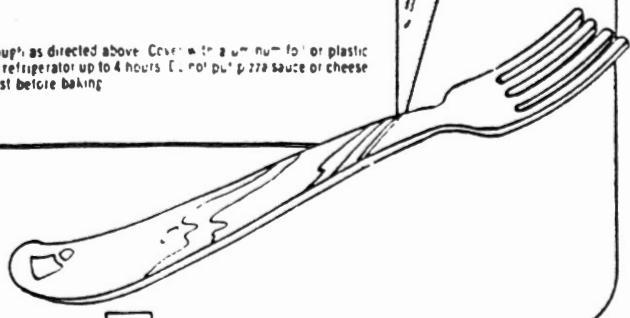




STEP III

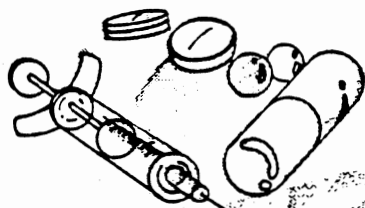
8. Sprinkle cheese over sauce.
9. Bake in preheated oven for 15-20 minutes or until crust is desired brownness.
10. Serve immediately.

Make up pizza dough as directed above. Cover with a warm towel or plastic wrap and store in refrigerator up to 4 hours. Do not put pizza sauce or cheese on dough until just before baking.



3

NARCOTIC DRUGS



WHAT ARE NARCOTIC DRUGS?

The term narcotic refers, generally, to opium and pain-killing drugs made from opium, such as heroin, morphine, paregoric, and codeine. These and other opiates are obtained from the juice of the poppy fruit. Several synthetic drugs, such as demerol, and dolophine, are also classed as narcotics. Opiates are widely used in medicine as pain killers. Cocaine, made from coca leaves, and marihuana are classified legally but not chemically as narcotic drugs.

Since heroin appears to be the narcotic used by most addicts today, these questions and answers deal mainly with heroin.

WHAT IS NARCOTIC ADDICTION?

When the abuser of a narcotic gets "hooked" — meaning addicted — his body requires repeated and larger doses of the drug. Once the habit starts, larger and larger doses are required to get the same effects. This happens because the body develops a "tolerance" for the drug.

One of the signs of heroin addiction is withdrawal sickness. When the addict stops using the drug, he may sweat, shake, get chills, diarrhea, nausea, and suffer sharp abdominal and leg cramps. Modern treatments help the addict through these withdrawal stages. Science now has new evidence that the body's physical addiction may last much longer than previously believed.

Lorem ipsum dolor sit amet...

There is another kind of drug dependence connected with the use of narcotics. This is known as psychological dependence. That is, taking the drug also becomes a habit for emotional reasons. For example, the addict comes to depend on the drug as a way to escape facing life.

Narcotic use can become even more of an escape than expected, because large or unexpectedly pure doses can and not uncommonly do result in death.

WHAT IS THE EFFECT OF THE DRUG?

Typically, the first emotional reaction to heroin is reduction of tension, easing of fears and relief from worry. Feeling "high" may be followed by a period of inactivity bordering on stupor.

Heroin, which is usually mixed into a liquid solution and injected into a vein, appears to dull the edges of reality. Addicts have reported that heroin "makes my troubles roll off my mind," and "it makes me feel more sure of myself."

The drug depresses certain areas of the brain, and may reduce hunger, thirst, and the sex drive. Because addicts do not usually feel hungry, their hospital care may include treatment for malnutrition. The drug may also reduce feelings of pain.

Withdrawal symptoms appear in the addicted person about 18 hours after the drug has been discontinued.

In general, effects of the drug are influenced by many factors. These include the user's personality, size and frequency of dose, and how the drug is taken.

WHO TAKES NARCOTICS?

Studies by the U.S. Public Health Service show that heroin addiction today is found chiefly among young men of minority groups in ghetto areas. Of the more than 60,000 known addicts listed by the Bureau of Narcotics and Dangerous Drugs, more than half live in New York State — and most of them in New York City. Recent figures show that more than half of the addicts are under 30 years of age.

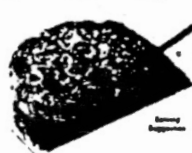
FOOD AD

PERFECT EATING EVERY TIME



Sliced Bacon

LUTRO'S
Smoked Slices
Grade A
Breakfast
1-lb. pkg. **69¢**



Ground Beef

Sold in 3-lb. Bulk Only
8-lb. Bulk
79.00
lb. **59¢**



Fryer Quarters

Breakfast
With Wing or
Leg Quarter
lb. **49¢**

M + L Market



BAND-AID

Disinfectant 79¢
Air Freshener 59¢
Lemon Pledge 79¢
Toothpaste 61¢
Aerowax 79¢

Sirloin Steak 99¢
Ground Beef 65¢
Ground Beef 99¢
Beef Steaks 99¢
Round Steak 99¢
Arm Steak 99¢
Arm Roast 95¢

Boneless Roast 95¢
Round Roast 99¢
Rib Steak 99¢
Rib Roast 99¢
Rib Roast 99¢
Smoked Picnics 55¢
Mild Sausage 98¢

Pork Roast 79¢
Fish Sticks 39¢
Pan Ready Perch 89¢
Cooked Cod 69¢
Fillet of Sole 79¢
Cornish Roasters 45¢
Longhorn Cheese 89¢

Ham Slices

TALMADGE
Crown and
End Slices
12 oz. pkg. **139¢**

Liver Sausage

Slices
lb. **49¢**

Sausage Links

BRIGGS
Skinless
1-lb. pkg. **79¢**

Crest Toothpaste

Family Size
Regular or Whitening
6.7-oz. tube **76¢**

Tomato Soup

Soda Crackers

Chunk Tuna

DISCOUNT PRICES

Applesauce
VENNY HOUSE
1-lb. jar **5¢**

Scot Towels
12 oz. pkg. **44¢**

DISCOUNT PRICES

Juice Drinks 2 59¢
Flour 59¢
Peanut Butter 65¢
Pretzels 39¢
Soft Drinks 22¢

DISCOUNT PRICES

Parsons' Ammonia
1-lb. jar **25¢**

Liquid Bleach
WHITE MAGIC
1-lb. jar **39¢**

DISCOUNT PRICES

Lysol 79¢
Lysol Liquid 77¢
Cleanser 23¢
Paper Towels 40¢
Ivory Liquid 79¢

GARDEN FRESH PRODUCE



TOMATOES

Firm Fresh

13 oz. can **29¢**

Bartlett Pears

Potatoes

Yellow Onions 10¢
Fresh Plums 29¢
Sweet Potatoes 2-33¢
Golden Carrots 2-27¢

APPLES

Virginia
Red
Delicious
4-lb. **4¢**

Red Tokay

Grapes **29¢**

LEASELEASE

AND THE LESSOR AND LESSEE for themselves, their heirs, executors, administrators and assigns do hereby covenant to and with each other as follows:

1. That the aforesaid rental shall include the cost of gas for normal cooking purposes and electricity for normal lighting and usual household appliance purposes used by Lessee on said premises. PROVIDED, HOWEVER, that the Lessor shall not be liable to Lessee or to any other person for damages or injury resulting from temporary failure of the electric or gas service. Lessee agrees not to install or operate in said apartment or building, any electric air conditioning machine, washing machine, or deep freeze, nor erect any outside television aerials without first obtaining the written consent of the Lessor, which consent may be revoked by Lessor at any time.

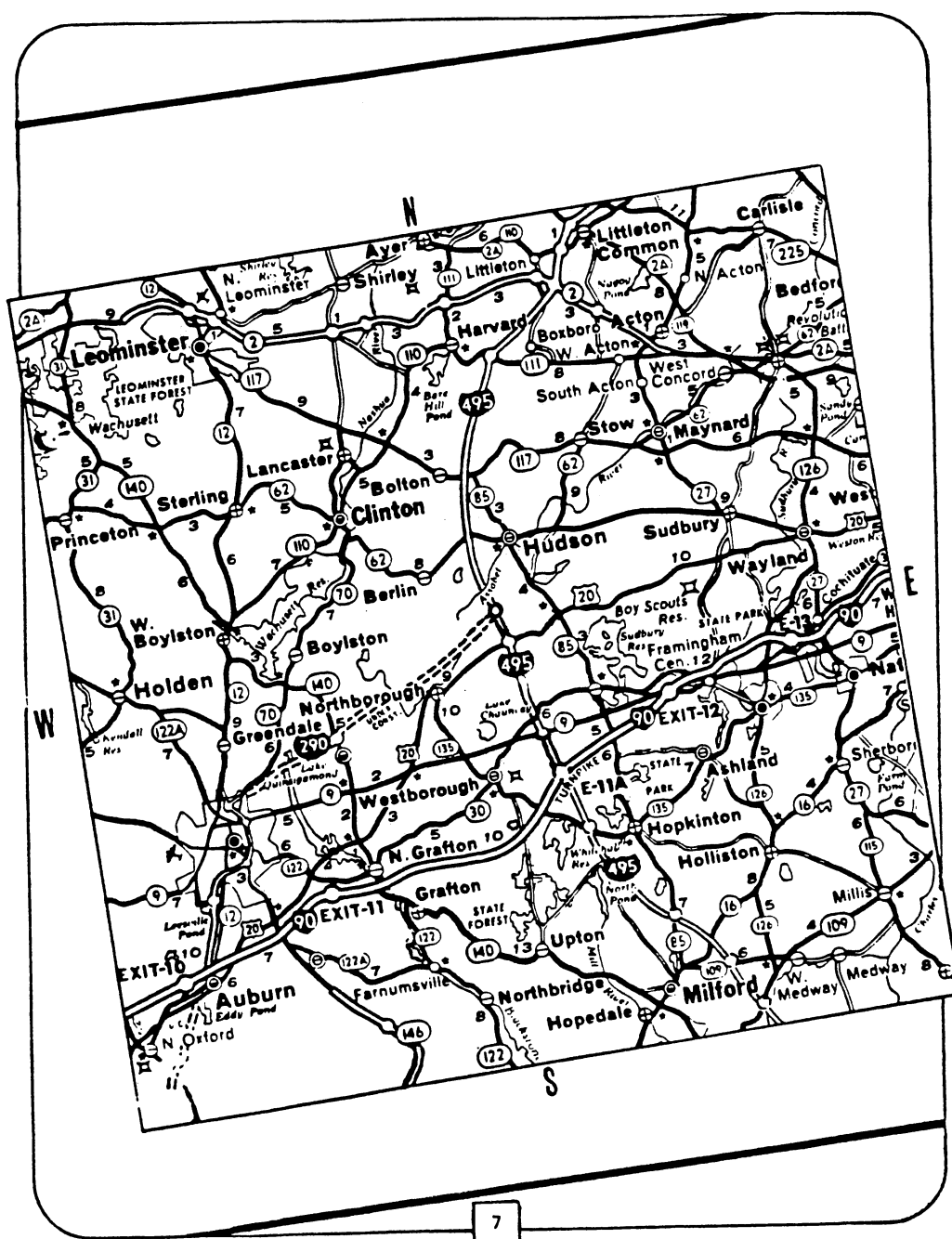
2. The Lessor shall not be liable for failure to deliver possession of said premises at the time stipulated herein as the date of the commencement of the tenancy, nor shall such failure excuse the Lessee's obligation hereunder, except that in the event of delay on part of Lessor in delivering said premises to Lessee, the rent herein stipulated to be paid by Lessee shall be abated for the period from the date of the commencement specified in this agreement to the date possession is tendered to Lessee.

3. The Lessor hereby covenants and agrees with the Lessee to furnish without additional cost, hot and cold water to all fixtures provided for the same, heat at all proper seasons of the year to radiators where installed, electric light bulbs and electric fuses at the time when Lessee takes possession but not thereafter. If Lessor shall furnish Venetian Blinds, same are to remain the property of Lessor.

The Lessor has installed an electric refrigerator and gas range in the demised premises, and under no condition shall said equipment be removed from said premises. The use by Lessee of his own or any other such equipment in said premises is hereby expressly prohibited.

4. And the said Lessee agrees that he will not use said premises or any part thereof for any disorderly, improper, objectionable or unlawful purpose, or for any other purpose than as a private dwelling as aforesaid, that he will not transfer or assign this agreement or sublet or transfer possession of said premises or any part thereof, to any person or persons without the written consent of Lessor first had and obtained, and only then under conditions as set forth by the Lessor, and he will not permit any additional persons to occupy the apartment without written permission of Lessor; that he will not place any signs or other advertising matter upon the doors, windows or walls of said demised premises or said building, and said Lessee agrees that if said Lessor shall deem the tenancy of said Lessee undesirable by reason of objectionable or improper conduct on the part of said Lessee or his family or visitors to his apartment, or by reason of conduct or actions of the persons aforesaid or any of them, causing annoyance or disturbance to other tenants in said building or adjoining buildings, then said Lessor reserves the right to terminate this agreement by giving Lessee personally, or by leaving at the demised apartment, a five days' written notice to quit and vacate said demised premises and may take possession thereof without legal process or may avail itself of any remedy provided by law for the restitution of possession.

ROAD MAP



WANT AD

903 Help Wanted

APPLIANCE SERV.—MAN/CUT-
SIDE PAID. POS. SALARY
Gen'l. Electronics, INC.
EM 2-300

ARCH. DRAFTSMAN — \$7,996.
FEE PAID. 2-4 yrs. exper. in arch.
firm in commercial or industrial
projects. Only SELF-MOTIVATED,
creative individuals need apply.
CALL Tom Adams, 953-7444.
LAUREL EMPLOYMENT, AM.
Tol. Bldg. Bldg. Laurel, MD.
(409-1)

ARCHITECT—For builder-developer
office. Reply to Wash. Post Box
No. 44444

ART EXHIBITION Sec. Asst. \$7500
**INTERNATIONAL
UNDERSTANDING
THRU ART**
\$7500—FEE PAID

This organization arranges art ex-
hibitions throughout the country—art
from all over the world—from
young artists as well as renowned
masters. You will be secretarial
assistants, but also a busy 100—
There's no other reason to qualify.
If you have basic secretarial skills, call
638-5791. (Agency Personnel), or stop
in at 1735 K St. N.W. (Suite 313)
(Agency).

ASST. HOTEL MANAGER—For sub-
sidiary hotel. Must have 10 yrs.
hotel experience. Phone Apts. Ar-
cadian, 932-200 for appt.

ASST. MGR.-HOST
BAR EXPERIENCE HELPFUL.
EVENING SHIFT. MUST BE CON-
FIDENTIAL AND WILLING TO
AND DEPENDABLE. APPLY AT
GEORGETOWN, 3104 M ST.
ASST. EXEC. MGR.

PUBLIC RELATIONS
\$6500 \$6500
Work in Exec. Staff. Promote
PR for corp. Attend functions,
dinners. Must be outgoing, willing
to wear and have good taste.
Big bonus. Free parking. Call 638-
4077. EMBASSY PERSONNEL, at
825 17th St. N.W. Suite 200 (Agency).

ASST. PROPERTY MANAGER
Asst. Property Manager for large
apartment in SE Wash.
Administrative & managerial ability
required. Excellent salary & com-
pany benefits. Call Mr. Harty, 562-
7411, Mon. thru Fri. PARKLAND
409-1

ASSISTANT BKKRN—Auto dealer
handle A/B and payroll. Start \$6500
us fee paid.
ATLAS AGENCY 795-7110
1600 L St. N.W. Suite 200

**ASST. AVIATION
NO SHTD. \$7800**

For the good liv'rs who want
SOMETHING DIFFERENT! This
special type operator needs
someone who can be completely at
ease when surrounded by heavy
M.D.'s, contact, especially "Ambas-
sadors" and Generalists who have a
great interest in aviation. Special
—free lunch deal— in this happy
atmosphere. CALL OR STOP IN.
634-9272. BETTY GRAY, 1730 "K"
St. NW. 115. Riddell Bldg. (Emp.)

ASST. FULL OR PART TIME
Exciting public relations work for
a new concept in entertainment.
Call Club National 581-1450

ASST. MANAGER

Do you have a flair for women's
fashions? Willing to be No. 3 per-
son to train for managerial respon-
sibilities? Excel. starting sal. &
benefits. Exper. in women's fash-
ions desirable. Call Mr. Kramer,
923-4472

GEM DEPT. STORE

ASST. MANAGER—Excel. salary &
advancement opportunity in ex-
citing cat. merch. operation. Call
Rockville Cat. Merch. 81-6015

905 Help Wanted

ASST. TO ATTORNEY \$7200
NO SHORTHAND
\$7200—FEE PAID

Enjoy working at the side of a pro-
fessional man with a great sense
of humor. No legal exp. nec. No
shnd., but your typing must be bet-
ter than avg. Dictaphone help!
Be responsible to only 1 man in
excl. Low Firm. Call 638-4777.
EMBASSY PERSONNEL, at 825
17th St. NW, Suite 200 (Agency).

ASST. MGR. TRAINEE—\$7900 Quick
adv. Top co. 370-6400. Republic
Perc. 121 S. Whiting St. Alex.

AUTOMATIC EQUIPMENT OPERA-
TORS—Night shift, for block plant.
Mrs. 4 am. 2-30 a.m. Call 420-9000.
Mr. Deckman.

AUTO SERVICE ADVISOR—I need
an experienced man who presents
himself well to the public &
likes to sell & can manage himself.
A his daily business transactions, 3
day wk. Paid vacation & holidays.
sick pay, life & hospitalization in-
surance. Executive uniforms sup-
plied. Call for appt. Mr. Lester,
General Parts Service Mgr. 273-
8702. Fairfax Chrysler-Plymouth,
15620 Lee Highway, Fairfax, Va.

AUTOMOTIVE
Assistant Parts Mgr.
\$175 + COMM.

Exper. in Delco-Talmon parts
w/management potential.

—Paid Hospitalization
—Paid Vacation
—Paid Sick Leave
—5 Day, 40 Hr. Wk.

Call Mr. Ellis
Imports Wholesalers
825-3312

AUTOMOTIVE SERVICE ADVISOR
To work for Mercedes-Benz/Fiat
dealers. Excellent salary, sick leave
& vacation plan, retirement plan,
company insurance & other fringe
benefits. This is a career position
in a constantly growing company.
Apply Mr. Zellin, American Service
Center, 585 N. Glebe Rd., Apt. 225
2100.

**AUTOMOTIVE
PARTS MAN**

Due to expansion into new facili-
ties we need an additional exper-
Counterman. Many co. benefits. Con-
tact Mr. Catlin or Mr. Frankfurter,
Mount Vernon Dodge, Capitol Belt-
way & Rt. 1, 5900 Richmond Hwy.,
Alex. Va. 748-5500.

AUTO PARTS TRUCK DRIVER
trainer. Contact Mr. Sizemore
Stoneman Chevrolet, 3307 M St. NW.

AUTO FRONT END & BRAKE
MECH—Will train for shipment.
4-day wk. paid vac. laundry.
Tues-Sat. 8 am to 6 pm. AL'S
BEAR SAFETY SERVICE, 8425
Mariboro Pike, 734-4222

AUTO TITLE CLERK—Exper. Go
gov. Employee benefits. Apply Mr.
Bennett, HEBBY'S FORD 824-4000.

AUTO Road Serv. driver must have
Md. permit. Day or eve shift.
With exp. preferred. Excel. starting
sal. + comm. Call Mr. Hickman,
Cat. Car. Inc. 631 Wisc. Ave. Be-
thesda, Md. OL 2-3900.

AUTO LOT MAN

We need a good lot man to check
in new autos. Many company bene-
fits, free hospitalization, sick leave,
paid holidays & vacation, profit
sharing plan. Apply in person to
Service Manager, Jack Snoddy, Bob
Banning Dodge, 5825 Baltimore
ave., Myrtleville, Md. 779-7400.

AUTO MECHANICS

We need 3 first class mechanics to
work in 8050 shop. Many company
benefits, free hospitalization, sick
leave, paid holidays & vacation,
profit sharing plan, 3 day wk.
Apply in person to Service Man-
ager, Jack Snoddy, Bob Banning
Dodge, 5825 Baltimore ave., Myrtle-
ville, Md. 779-7400.

905 Help Wanted

AUTO SALESMEN (2)

To sell new and used cars. Experi-
ence preferred, but will train.
Weekly draw against comm. pay
plan. Contact Sales Manager,
Indian Head
Chrysler Plymouth
783-7107

AUTO HELP WANTED
Warranty Clerk

Auto Parts Counterperson
Some experience required. Good
pay plan. Paid holidays & company
benefits.

LOGAN FORD
4801 Commerce St. Springfield, Va.
451-8810

AUTO SALESMAN—No experience
necessary. Must be over 21. Good
pay plan, company benefits, paid
vacation.

**SELLERS CHRYSLER
PLYMOUTH**
7710 Annapolis Rd.
Lanham, Md.

AUTOMOTIVE

MEN

**TRAIN TO BE A
TIRE INSTALLER**

NO EXPERIENCE NECESSARY

KORVETTES

**Tire & Auto
Centers**

SECURITY PLUS!

Steady year-round employment with
which you can plan your future.
Genuine opportunity for steady
growth and advancement.

Benefits Galore!

Hospitalization, paid vacation and
holidays. Employee discount.

APPLY TODAY OR CALL

ROCKVILLE, MD.
1180 ROCKVILLE PIKE
AT MONTROSE RD.
MR. PERKELL 81-4080

AUTO SALESMAN

Here is a career opportunity for an
aggressive capable new car sales-
man at Monroe Ford in Silver
Spring. Long established success-
ful dealer. Liberal pay plan in-
cluding profit sharing on sale of
traded cars. Small sales force,
strong closing assistance, many re-
sult buyers, excellent benefits.
Guaranteed weekly earnings of \$200
to start. It will pay you to invest.
Take this opportunity. Call Mr. Ken
Berry or Mr. Martin Weiner for
appointment. JU 5-7800, Monroe
Ford, Silver Spring, Md.

AUTO SERVICE ADVISOR — For
Datsun/BMW dealership. Must have
mechan. exper. Paid holidays & vaca-
tion, profit sharing. Contact Mr.
Rice, 654-8416

AUTO PORTER — For automotive
dealership. Must have valid permis-
sion, profit sharing & vacation. Mr.
Rice, 654-8416

AUTO MECHANIC — For BMW/Dat-
sun dealership. Must have exper.
Commission pay plan. Paid holi-
days & vacation. Contact Mr. Rice,
654-8416

AUTOMOTIVE—One sharp DIS-
PATCHER, VW exper. necessary;
one new-car receiving & prepara-
tion FOREMAN, 2 sharp POR-
TERS. Excel. pay plan, vacation,
sick leave, profit sharing & other
usual benefits. Apply in person to
Mr. Cole, Lee Volkswagen, Inc.,
4571 Belcliff Rd. Springfield, Va.
451-7944

JOB APPLICATION

FULL NAME _____ AGE _____ DATE OF BIRTH _____ S.S. _____

ADDRESS _____ CITY & STATE _____ ZIP CODE _____ TEL _____
Leads Against Discrimination Prohibit Discrimination On Account Of Age

HOW LONG HAVE YOU LIVED AT THE ABOVE ADDRESS? _____ HOW LONG HAVE YOU LIVED IN THIS CITY? _____

FATHER'S FULL NAME _____ WHERE EMPLOYED _____

MOTHER'S FULL NAME _____ WHERE EMPLOYED _____

HAVE YOU PROOF OF AGE? _____ IS ANYONE DEPENDENT ON YOU FOR SUPPORT? _____ WHO? _____

IF MARRIED, HUSBAND'S OR WIFE'S NAME _____

WHERE EMPLOYED? _____

NO. CHILDREN _____ AGES _____

HAVE YOU A RELATIVE NOW EMPLOYED _____

IF SO, GIVE NAME AND RELATION _____

WHERE EMPLOYED? _____

MARK "X" IN SQUARE THAT FITS YOUR CASE

- | | |
|------------------------------------|---|
| <input type="checkbox"/> SINGLE | <input type="checkbox"/> LIVING W/PARENTS |
| <input type="checkbox"/> MARRIED | <input type="checkbox"/> HOUSEKEEPING |
| <input type="checkbox"/> WIDOWED | <input type="checkbox"/> LIVING W/RELATIVES |
| <input type="checkbox"/> SEPARATED | <input type="checkbox"/> BOARDING |
| <input type="checkbox"/> DIVORCED | <input type="checkbox"/> ROOMING |

EDUCATION	NAME AND LOCATION OF SCHOOL	YEARS ATTENDED	COURSE PURSUED	DATE LEFT	DID YOU GRADUATE?
HIGH SCHOOL					
COLLEGE					

* POSITION APPLIED FOR _____ FULL TIME _____ PART TIME _____ SAT. ONLY _____ **TEMPORARY _____

** IF TEMPORARY POSITION, PLEASE INDICATE. SIGNATURE OF APPLICANT _____

ANSWER SHEET

Test No.:

ROAD SIGNS

1. _____
2. _____
3. _____
4. _____
5. _____

TELEVISION SCHEDULE

1. _____
2. _____
3. _____
4. _____
5. _____

CHEESE PIZZA

1. _____
2. _____
3. _____
4. _____
5. _____

NARCOTIC DRUGS

1. _____
2. _____
3. _____
4. _____
5. _____

FOOD AD

1. _____
2. _____
3. _____
4. _____
5. _____

LEASE

1. _____
2. _____
3. _____
4. _____
5. _____

ROAD MAP

1. _____
2. _____
3. _____
4. _____
5. _____

WANT AD

1. _____
2. _____
3. _____
4. _____
5. _____

Name _____

Date _____

Company _____

APPENDIX B

JOB-SPECIFIC SCREENING INSTRUMENT

FOR MANAGERS AT ST. JOHN'S

HOSPITAL

ST. JOHN MEDICAL CENTER
DEPARTMENT OF MAINTENANCE AND
PLANT OPERATIONS

*** **MATCHING** - Find the word in the right column that means the same as the underlined word in the left column. Put the letter in the blank.

- | | |
|---|-------------------|
| ___1. job <u>demotion</u> | A. oversight |
| ___2. <u>longevity</u> increase temporarily | B. dismiss |
| ___3. <u>probation</u> period | C. event |
| ___4. <u>confidential</u> report | D. length of time |
| ___5. 1st <u>offense</u> | E. violation |
| ___6. temporary <u>suspension</u> | F. repetition |
| ___7. location of the <u>incident</u> | G. trial |
| ___8. <u>substance</u> inflicting injury | H. material |
| ___9. what <u>omission</u> caused | I. lower position |
| ___10. prevent <u>recurrence</u> | J. private |

PLEASE REFER TO ATTACHMENT 1 -- STANDARD OPERATING PROCEDURES -- SECTION E -- EMERGENCY TIE PROCEDURE

11. The maximum amps on Main Switch 1 is _____.
12. The maximum amps on Main Switch 3 is _____.
- ___13. TRUE or FALSE -- The loads in item E can be turned on in 5 minutes.

PLEASE REFER TO ATTACHMENT 2 -- STANDARD OPERATING PROCEDURES -- SECTION G -- A.I.D.S. PRECAUTIONS

- ___14. Each employee will read this procedure:
- A. every other year
 - B. twice every year
 - C. every year

15. Masks, eye coverings and gowns are provided at two locations. List them on the line below.
-

PLEASE REFER TO ATTACHMENT 3 -- STANDARD OPERATING PROCEDURES -- PROGRESSIVE DISCIPLINARY POLICY

16. Name an unsatisfactory behavior listed on the attachment that results in a written warning as the first progressive step.
-

- ____ 17. TRUE or FALSE If the same offense happens 14 months after the first, the second step in the progressive disciplinary policy should take place.

PLEASE REFER TO ATTACHMENT 4 -- STANDARD OPERATING PROCEDURES -- PAYROLL POLICIES AND PROCEDURES

- ____ 18. TRUE or FALSE The department head may record VAC and SLN.

19. The punishment for recording time worked on another employee's time card may be
-

- ____ 20. New time cards for employees should be received on the Friday:

- A. of the next pay week
- B. before the next pay week
- C. after the next pay week

APPENDIX C

JOB-SPECIFIC SCREENING INSTRUMENTS

FOR EMPLOYEES AT ST. JOHN'S

HOSPITAL

TEST FM *

Matching - Find the word in the right hand column that means the same as the word in the left column. Put the letter in the blank.

- | | |
|-----------------|----------------------------|
| ___1. Corrosive | a. Used to change pressure |
| ___2. Data | b. Washes away in water |
| ___3. Irritant | c. Dissolves metal |
| ___4. Valve | d. Information |
| ___5. Pump | e. Used to restrict flow |
| ___6. Fan | f. To soak into |
| ___7. Sewer | g. Causes skin sores |
| ___8. Ingest | h. Move air |
| ___9. Absorb | i. To swallow |
| ___10. Soluble | j. Drain for used water |

11. What does it mean to isolate?

- a. Combine with
- b. Separate from
- c. Do without

12. Bypass means to :

- a. Hook together
- b. Take apart
- c. Go around

13. What is toxic?

- a. Dirty
- b. Poison
- c. Explosive

14. A specification is :

- a. A rule to live by
- b. A true description
- c. A special rule

15. How is electricity tested?

- a. With a voltmeter
- b. With a wrench
- c. With a hammer

* Attachments to individual tests not available.

16. Voltage is :

- a. A level of energy
- b. The amount of change in a furnace
- c. The distance between wires

17. What is a schematic?

- a. Diagram showing the path of electricity
- b. A transformer
- c. A code of law

18. What are blue prints used for?

- a. To write business letters
- b. To discipline employees
- c. To build something with

19. Another name for spacer is :

- a. Shingle
- b. Sparks
- c. Shim

20. What is a parts inventory?

- a. List of parts
- b. Department in charge of ordering parts
- c. An invention that comes in parts

TEST DH

MATCHING - Match the words in the right column to those in the left column which mean the same thing. Put the letter in the blank.

- | | |
|---------------------------------|-------------------------|
| ___1. Trouble Shoot | a. Every year |
| ___2. <u>Estimated</u> cost | b. Poisonous |
| ___3. Annual | c. Look for |
| ___4. Schematics | d. Burns easy |
| ___5. <u>Actual</u> | e. Approximate |
| ___6. Oral | f. Outline of objects |
| ___7. Toxic | g. Reduce concentration |
| ___8. <u>Flammable</u> material | h. Correct |
| ___9. Inhale | i. Verbal |
| ___10. Dilute | j. Breathe in |

Please refer to Attachment #1 - Time Card

11. Who must approve overtime in advance?

12. What does FFL mean? _____

- a. Legal holiday
- b. Sick leave
- c. Family Funeral

Please refer to Attachment #2 - Job Description

13. What educational qualifications are required for the carpenter position?

14. The carpenter is considered tardy if he clocks in fifteen minutes after is scheduled starting time.

True False

15. The physical working conditions may expose the carpenter to cuts, bruises, and

_____.

16. Under the heading "Worker Traits" the carpenter must be able to understand space relationships.

True False

17. Confidential information may be told to anyone.

True

False

18. Under the heading "Appearance" the carpenter must always wear a name tag on the right side of the shirt.

True

False

Please refer to Attachment #3 - Employee Request for Personnel Action

19. Which box would you check if you wanted to work at a different time than you do now?

- a. Demotion
- b. Promotion
- c. Shift Change

20. You must sign your name on the form when you request a yearly vacation.

True

False

TEST OM

Matching - Match the words in the right column to the words that mean the same in the left column.

- | | |
|-------------------------|-----------------------------|
| ___ 1. Incident | a. Poisonous |
| ___ 2. Oral | b. Private |
| ___ 3. Punctual | c. An event |
| ___ 4. Toxic | d. OK to be gone |
| ___ 5. Accurate | e. Spoken verbally |
| ___ 6. Transfer | f. On time |
| ___ 7. Confidential | g. Correct |
| ___ 8. Approved absence | h. Move from one to another |

Please refer to the attachment 1 - Time Card

9. The code for Leave of Absence" is _____
10. MIL is the code for _____
11. If you are ill and should get paid for your time off which code should you use? _____
12. When you sign out on your time card at 1300 you have left work at:
- a. 1:00 pm
 - b. 2:00 pm
 - c. 4:00 pm
13. VAC is:
- a. Leave of absence
 - b. Jury Duty
 - c. Earned Vacation

Please refer to Attachment 2 - Fighting the Fire

14. One of the first things you should do when you spot a fire is to inform the Centrex Operator.

True

False

15. Who will take the Tulsa Fire Department to the scene of the fire?

-
16. Extinguish means to start a fire.

True

False

17. Halon fire extinguisher are used on Class F and G fires.

True

False

18. Some samples of combustible materials are wood, cloth, rubber, and plastic.

True

False

Please refer to Attachment 4 - Maintenance Work Request

19. The form number for the maintenance Work Request form is # _____.

20. If three new employees need access to a door which is always locked, which box would you check on this form?

- a. Request for signs
- b. Request for keys
- c. Receipt date

TEST HM/JM

Matching - Find the word in the right column that means the same as the word in the left column. Put the letter in the blank.

- | | |
|----------------------------|-------------------------|
| ____ 1. Authorization | a. On-going |
| ____ 2. Promoted | b. Middle |
| ____ 3. Coordinate | c. Figure out |
| ____ 4. Occasionally | d. Permission |
| ____ 5. Interrelationships | e. Others you work with |
| ____ 6. Continuous | f. Important |
| ____ 7. Average | g. Now and then |
| ____ 8. Calculate | h. Change in direction |
| ____ 9. Reverse | i. Organize |
| ____ 10. Priority | j. Advanced |
| | k. Demoted |

Please refer to Attachment 1 - Betz Entec Calculation

11. If steam production equals 850,000 lbs. per day, what is the corresponding 722 feed rate lbs. per day?

_____ lbs.

Please refer to Attachment 2 - DISASTER PLAN FOR PLANT

12. During a disaster, who reports to the Department Office?

-
13. True or False - Personnel reporting to the Main Lobby will maintain utility services during a disaster.

Please refer to Attachment 3 - Employee Incident Report

14. Who is the "charge Person" on the evening shift?

-
15. True or False - You must close valve #52 to cross-connect the vacuum system of the north tower to the South Wing.

Please refer to Attachment 6 - AIR SYSTEM BACKUP

16. What valve is used to isolate a bulk nitrogen line?

17. How many backup air-system valves are located in the North Tower Basement?

18. What services need to be shut off while on backup air supply?

- a. Laundry
- b. North Tower
- c. South Wing
- d. Administrative Services Building

Please refer to Attachment 7 - SHIFT DUTIES

19. True or False - The engineer must check cooling Tower water level daily.

20. Three new employees need access to 5 South. Which box do you check on the Maintenance Work Request (Attachment #8).

- a. Request for signs
- b. Request for keys
- c. Emergency or priority work

TEST RF

Please refer to Attachment 1 - Time Card

1. What is the time card abbreviation for :
Approved Absence (Not Paid)? _____

Please refer to Attachment 2 - Job Description

2. Under the header "Job Relationship", who does a
Mechanic II report to? _____
3. Under the header "Tool Prerequisites", list three tools
required.

4. Under the header "Punctuality and Attendance", you are
considered tardy after how many minutes?

Circle the correct answer to the following questions.

5. The symbol 0 represent what?

- A. Duplex receptacle
- B. + dc voltage
- C. A wall switch
- D. 125 volt panel

6. A grounded conductor is a system or circuit conductor
that is unintentionally grounded.

True False

7. A relay could be used in a remote control circuit.

True False

8. An enclosure is sometimes referred to as a cabinet.

True False

9. In the N.E.C. bare is defined as a conductor having a
red jacket.







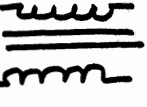
True False

10. A continuous duty relay is one that is not energized often.

True

False

Matching - Match the word in the right column to the symbol in the left column. Put the letter in the blank space.

Symbol	Word
____ 11. (+) 24	a. MilliAmps
____ 12. 	b. Lamp
____ 13. 	c. Ground
____ 14. M.A.	d. Normally opened current
____ 15. K.W.	e. Positive 24 volts direct current
____ 16. 	f. Normally closed
____ 17. 	g. Fuse
____ 18. 	h. Transformer
____ 19. 	i. Single pole switch
____ 20. 	j. Kilowatts

APPENDIX D
JOB-SPECIFIC SCREENING INSTRUMENT
FOR STORM WATER MANAGEMENT
DEPARTMENT MANAGERS

TEST

CITY OF TULSA

DEPARTMENT OF STORM WATER MANAGEMENT

*** MATCHING - Find the word in the right column that means the same as the underlined word in the left column. Put the letter in the blank .

- | | |
|--------------------------------------|------------------------|
| ___1. <u>attain</u> goals | A. supervisors |
| ___2. <u>pertinent</u> information | B. suggest |
| ___3. <u>imply</u> guilt | C. two |
| ___4. <u>suspension</u> without pay | D. scolding |
| ___5. <u>subordinates</u> cooperate | E. accomplish |
| ___6. <u>delegate</u> tasks | F. meaningful |
| ___7. written <u>reprimand</u> | G. employees |
| ___8. <u>duplicate</u> copies | H. motivation |
| ___9. <u>appropriate</u> description | I. dismiss temporarily |
| ___10. <u>initiative</u> to work | J. assign |
| | K. three |
| | L. dismiss permanently |
| | M. fitting |

TEST

*** TRUE or FALSE - Put "T" for True or "F" for False in the blank.

"The supervisor shall insure that the City Physician is notified of such treatment."

____ 11. The supervisor fills out the insurance papers for the Physician.

"Every employee of the City involved in an accident, regardless of how minor, while operating a City vehicle, shall immediately report its occurrence to his/her immediate supervisor and to the Tulsa Police Department."

____ 12. Three reports have to be filed if you have an accident while driving a City vehicle.

*** COMPLETION - Circle the answer or fill in the blank.

"A grievance under this policy shall be defined as any dispute involving the meaning, interpretation or application or alleged violation of the policies and procedures established by the Civil Service Commission as promulgated in the Personnel Policies and Procedures Manual of the City of Tulsa. Disputes involving an individual's pay and/or classification shall be subject to the Grievance Procedure. Classification/pay grade grievances shall be limited to allegations of improper use of the prescribed classifications/pay grade methodology. Additionally, suspension of ten (10) days or less shall fall under the Grievance Procedure. Suspension of more than ten (10) days and other disciplinary action including demotion or removal shall not be proper subject of the grievance (see "Right of Appeal"). Employee grievances of alleged discrimination due to non-merit factors shall be filed in accordance with the procedures defined in this manual under "Discrimination Claims and Appeal Procedure." No grievance shall be heard by the Civil Service Commission when such grievance could have been filed under a grievance Procedure established within an existing labor agreement between the City of Tulsa and a recognized collective bargaining agent representing the grievant."

13. Classification/pay grade grievances (are) (are not) limited in this grievance procedure.
 14. Suspensions of more than ten days (are) (are not) handled by this grievance procedure.
 15. Grievances involving non-merit factors are found under ("Discrimination Claims and Appeal Procedure") ("Right of Appeal").
 16. Name the group that hears grievances filed under this policy.
-

17 - 20. A grievance in this policy is a disagreement over the (17) _____,

(18) _____,

(19) _____ or

(20) _____
of procedures or policies.

APPENDIX E

JOB-SPECIFIC SCREENING INSTRUMENTS

FOR STORM WATER MANAGEMENT

EMPLOYEES

TEST I. *

Match the word in the right column that best describes the word in the left column.

- | | |
|-------------------|-----------------|
| ___ 1. Covenants | A. Average |
| ___ 2. Arc | B. Bounds |
| ___ 3. Section | C. Square |
| ___ 4. Level | D. Course |
| ___ 5. Slope | E. Measure |
| ___ 6. Grid | F. Mile |
| ___ 7. Latitude | G. Township |
| ___ 8. Traverse | H. Restrictions |
| ___ 9. Mean | I. Volume |
| ___ 10. Angle | J. Curve |
| ___ 11. Range | K. Horizontal |
| ___ 12. Bearing | L. Longitude |
| ___ 13. Area | M. Elevation |
| ___ 14. Benchmark | N. Degree |
| ___ 15. Metes | O. Hypotenuse |

Plat on SWEETBRIAR EAST

TRUE or FALSE

16. Block 10 has 34 Lots, 28 of those help form the boundary RESERVE "B". _____
17. Starting at the SE corner of RESERVE "B", thence N-89-50-33W a distance of 309.20 feet, thence a distance of 249.56 feet, thence a distance of 399.12 feet you would be at the corner of Lot 21 & 22 Block 10. _____

Plat on SULLIVAN COURT

18. The entire addition is in the N1/2, of the N1/4, of the SE1/4, of section 29, R-13-E, T-20-N. _____

CIRCULAR CURVES

19. From the figure 25-4 is the relationship between T, and R, perpendicular? _____
Is this always, sometimes, or hardly ever true? _____

* Attachments to individual tests not available

20. In figure 25-4, PT STATION is 50+00, using what is given, what is the PLUS at the PC?

TEST II.

MSDS SHEET: (1-8)

1. What is the product named on the MSDS sheet?
2. What is the product's greatest health risk?
3. How much of this product is inert material?
4. What is the emergency first aid procedure recommended for inhalation of the product's mist?
5. What special respiratory protection is required to use with this product during a routine field application?
6. What is the normal appearance of this product?

True or False: (7-8)

7. Clothing contaminated with this product must be disposed of in an approved landfill.
8. Fire involving this product may be extinguished by using a water spray.

Matching: (9-13)

- | | |
|----------------------|--|
| ___ 9. Pre-emergence | A. Yearly |
| ___ 10. Annual | B. Relationship to Northern Hemisphere |
| ___ 11. Volume | C. The meeting of two streams |
| ___ 12. Organic | D. Before coming into view |
| ___ 13. Confluence | E. Monthly |
| | F. Space occupied |
| | G. Natural poisons |
| | H. Pertaining to living organisms |
| | I. Weight by ton |

Service Request: (14-18)

14. What is the service request number?
15. Where is the problem located?
16. How many man hours were involved to complete the project?

17. What is the equipment identification number of the dump truck that has been leased?
18. What date was the work completed?

Map: (19-20)

19. What is the quickest route from downtown to Highway 169 North?
-

20. How many miles are there from 81st and Garnett to the Broken Arrow Expressway?
-

Test III.

Word Association:

- | | |
|----------------------------|------------------------|
| ___1. Address | a. Tell the boss |
| ___2. Right-of-way | b. What is wrong |
| ___3. Report to supervisor | c. What was done |
| ___4. Debris | d. Wash out |
| ___5. Employees Signature | e. Location |
| ___6. Problem | f. Permission to enter |
| ___7. Complete Project | g. Bulldozer |
| ___8. Erosion | h. Your name |
| ___9. Work performed | i. Finish |
| ___10. 850 | j. Trash |

True/ False:

- ___11. Orange vests and hard hats are not required.
- ___12. Report accident to your supervisor.
- ___13. All employees are required to wear seatbelts.
- ___14. It is not necessary to report to authorities when closing a road during bridge patrol.
- ___15. An incident report is to be filled out on every accident.

Attachment #1 - JOB WORK - COST SHEET

16. Where is the problem at?

17. What needs to be done to solve the problem?

18. When did we find out about the problem?

19. Who told us about the problem?

20. Where does the man live who told us about the problem?

TEST IV.

Word Association

Match the words in the right hand column with the word they best describe in the left hand column:

- | | |
|----------------------|----------------------|
| ___1. Gradall | a. Machinery |
| ___2. Ditching | b. Location |
| ___3. Date | c. Excavator |
| ___4. Equipment | d. Finished |
| ___5. Barricades | e. Month, Day, Year |
| ___6. Culvert | f. Yes or Understood |
| ___7. "10 - 4" | g. Remove siltation |
| ___8. Address | h. Cross over pipe |
| ___9. Vehicle number | i. Traffic Control |
| ___10. Complete | j. Unit |

True or False

Put a T in the blank if the statement is true, or put an F in the blank if the statement is false.

- ___11. All employees are required to wear seatbelts.
- ___12. All employees are required to wear hard hats while working in the streets.
- ___13. All employees are required to wear safety vests while working in the creeks.
- ___14. It isn't necessary to use a flagman while backing a dumptruck.
- ___15. Traffic control signs should be used on all jobs no matter how small.
- ___16. A tandem load of dirt is considered ten yds.
- ___17. The city will purchase all tiles when replacing driveway tiles.

This is a heading on a service request form. Read it carefully, then answer the questions that follow:

Ditch needs to be cleaned, filled with mud and water backs up after a heavy rain. Her yard is being flooded. Mrs. Kingfisher of 2626 N. Maplewood called this in 7-23-86, to Sharlet Ball.

18. Who reported the problem?
-

19. Location of problem?

20. What is the complaint?

TEST V.

Word Association

Match the words in the right hand column with the word they best describe in the left hand column:

- | | |
|-----------------------|-----------------------|
| ___ 1. Finished | a. What is wrong |
| ___ 2. Catch basin | b. What was done |
| ___ 3. Problem | c. Machinery |
| ___ 4. Materials | d. Drain |
| ___ 5. Manhole | e. Hole or depression |
| ___ 6. Equipment | f. Complete |
| ___ 7. Work preformed | g. Supplies |
| ___ 8. Cave - in | h. Access area |

True or False

Put a T in the blank if the statement is true, or put an F in the blank if the statement is false.

- ___ 9. A catch basin is a graded inlet.
- ___ 10. A manhole can be a grated salesman.
- ___ 11. A drop inlet is a grated inlet.
- ___ 12. All catch basins are built with throats.
- ___ 13. All catch basins are located at corners.
- ___ 14. All employees are required to wear seatbelts.
- ___ 15. Concrete mix should be used to repair tile joints.
- ___ 16. Hard hats are required when working underground.
- ___ 17. Entry of the storm sewer is allowed only in 24" or larger lines.
- ___ 18. It isn't necessary to use a flagger while backing a dump truck.

Multiple Choice

Circle the letter beside the correct answer.

19. You are going to build a catch basin. What tools will be needed?
- a. Brick - Sand Mix - Frame-grate - Throat
 - b. Shovel - Wheelbarrow - Trowel - Hose
 - c. Backhoe - Dump truck - Air Compressor
 - d. All of the above
 - e. None of the above

20. You are going to build a manhole. What materials will be needed?

- a. Brick - Sand Mix - Frame - Cover
- b. Shovel - Wheelbarrow - Trowel - Hoe
- c. Backhoe - Dump truck - Air Compressor
- d. All of the above
- e. None of the above

TEST VI.

Match the words on the right which means about the same as the words which are underlined on the left:

- | | |
|---|------------------------|
| ___ 1. <u>Problem</u> | a. Leave without pay |
| ___ 2. <u>Address</u> | b. Exact information |
| ___ 3. <u>Labor</u> | c. Check into |
| ___ 4. <u>Equipment</u> | d. Permission |
| ___ 5. <u>Injury</u> | e. Your name |
| ___ 6. <u>Request</u> | f. How many |
| ___ 7. <u>Number</u> | g. Broke Rules |
| ___ 8. <u>Leave</u> | h. Things to go over |
| ___ 9. <u>Employee Signature</u> | i. Truck, Cars, Tools |
| ___ 10. <u>LWOP</u> | j. Work |
| ___ 11. <u>Investigation</u> | k. Location |
| ___ 12. <u>Disciplinary Action Report</u> | l. Vacation |
| ___ 13. <u>Pre-Action</u> | m. Cut, Bruise, Sprain |
| ___ 14. <u>Pertinent</u> | n. Trouble |
| ___ 15. <u>Check List</u> | o. Before Action Taken |
| | p. Management |
| | q. Authority |
| | r. Right-of-way |

" Clean four (4) catch basins at the corner of Owasso and North Peoria, behind the curb line by the telephone pole. Have called several times before, 4-20-88 and 3-17-88, neighbor was drowned twice by high water. Very irate, call first.

1325 N. Oswego

224-8187

Mrs. Blackburn

16. Problem

17. Location

18. Times Reported

19. How bad is problem

20. Who called?

TEST VI.

- | | |
|---------------------------------|------------------------------|
| ____1. Problem | a. Things needed fixed |
| ____2. Address | b. Valuable information |
| ____3. Date | c. Name |
| ____4. Hours | d. Personal file |
| ____5. Vehicle number | e. What is wrong |
| ____6. Signature | f. Tell the boss |
| ____7. Report to the supervisor | g. What has been done |
| ____8. Maintenance needed | h. Month, Day, Year |
| ____9. Loads | i. Location |
| ____10. Describe | j. What unit |
| ____11. Action taken | k. Explain or tell |
| ____12. Record | l. How many times to
dump |
| ____13. Pertinent information | m. How long did it take |
| ____14. Debris | n. Trash |

" There is a drainage ditch that is full of debris and siltation on the Northwest corner of 56th South Harvard. It was reported by Mrs. Doyal, living at 4607 N. Lewis. It was first called in on January 3, 1987. Today is March 27, 1988. "

- | | |
|----------------------------------|----------------------|
| 15. _____ | Who reported it? |
| 16. _____
reported? | When was it last |
| 17. _____ | On which corner? |
| 18. _____ | What is the problem? |
| 19. _____
problem? | Where is the |
| 20. _____
was first reported? | What was the date it |

APPENDIX F

REPORT TO ST. JOHN'S HOSPITAL

MICRO RESOURCES, INC.
11306 South First Street
Jenks, OK 74037
(918) 299-8882

June 30, 1988

St. John Medical Center
Department of Human Resources
1923 South Utica
Tulsa, OK 74104

Atten: Ms. Tonja Pitzer

Dear Tonja:

Enclosed please find the results of the workplace literacy screening test and the Reading/Everyday Activities in Life (R/EAL) test, along with the answer sheets.

Supervisors' tests are report numbers 101 through 108. Employee tests are report numbers 110 through 164. Please note that employee report numbers are not consecutive numbers. Several tests must not have been returned.

Test scores were considered in the acceptable range of 80% or higher was attained.

Attachment A is the list of the results of all tests returned to me. Attachment B is the list of test scores which were less than 80% on the R/EAL standardized test. Attachment C is the list of test scores which were less than 80% on the screening test. Attachment D is the list of test scores which were less than 80% on both tests. List B, the R/EAL test, flags 4 tests. List C, the screening test, identifies a total of 6 in a problem range. List D identifies only 2 tests.

Several items deserve discussion. First, I question the validity of test number 152. No screening test was returned, therefore no score was available. The R/EAL test appeared to have been attempted. Nearly all the blanks were filled out. I think retesting or a personal interview should be conducted with this employee.

Second, although only two tests (152 & 164) were flagged by both measurements, tests 108, 118 and 171 (flagged by the screening test) had R/EAL scores that were very close to the problem range. Only test 107 displayed a wide disparity between the two measurements.

Third, please note that tests 107 and 108, flagged by the screening test, are managers.

I have forwarded a copy of these results to Mr. Hugh Doherty at the Private Industry Training Council. I would strongly recommend that you contact Mr. Doherty, 428-2271, to investigate services which PITC can provide to the employees who appear to have difficulty. Low scores occur for a variety of reasons. Any reason bears investigation, whether it be test anxiety, the need for an eye examination, or any other reason including a need for upgraded reading skills.

I have enjoyed working with you and your group. If you desire my help in continuing with the screening in other departments, please contact Mr. Doherty to make arrangements. If you have any questions regarding the test results or procedures, or any other information which I can provide, please don't hesitate to call me.

Sincerely,

Diana D. Atkinson

APPENDIX G

REPORT TO CITY OF TULSA DEPARTMENT
OF STORM WATER MANAGEMENT

MICRO RESOURCES, INC.
11306 South First Street
Jenks, OK 74037
(918) 299-8882

June 30, 1988

City of Tulsa
Department of Storm Water Management
7105 E. Admiral Place
Tulsa, OK 74115

Atten: Ms. Mary Ann Summerfield

Dear Mary Ann:

Enclosed please find the results of the workplace literacy screening test and the Reading/Everyday Activities in Life (R/EAL) test, along with the answer sheets and identifiers for your people. Because some sections of your department duplicated numbers on their tests, I have renumbered tests as necessary. Please note that managers' tests are as follows:

<u>MY REPORT</u> <u>NUMBER</u>	<u>YOUR TEST</u> <u>NUMBER</u>
50	10-S
51	1-S
52	2-S
53	3-S
54	4-S
55	5-S
56	6-S
57	7-S
58	8-S
59	9-S

Employee tests are report numbers 1 through 49 and number 60. Report numbers 1 through 32 are the same as your test numbers. Test numbers 33 through 49 and test number 001 have the original test number crossed out and a report number written in red to identify them uniquely.

Test scores were considered in the acceptable range if 80% or higher was attained.

Attachment A is a list of the results of all tests returned to me. Attachment B is the list of test scores which were less than 80% on the R/EAL standardized test. Attachment C

is the list of test scores which were less than 80% on the screening test. Attachment D is the list of test scores which were less than 80% on both tests. You will note that lists B and D flag the same 8 tests. List C, the screening test, identifies a total of 13 in a problem range. Eight of these, as I have already indicated, are flagged on both tests. Two others, test numbers 39 and 54, are very close to the problem range on the R/EAL test also. Test numbers 10, 22 and 60 indicate a wide discrepancy between the screening test and the R/EAL test. Test 10 did not complete the second page of the screening test. Tests number 22 and 60 had no particular patterns to their errors. It is significant that all three of these test were very close to the acceptable range in the screening test. Also please note that one of the employees identified by both tests with scores well below the acceptable range is a manager.

I have forwarded a copy of these results to Mr. Hugh Doherty at the Private Industry Training Council. I would strongly recommend that you contact Mr. Doherty, 428-2271, to investigate services PITC can provide the employees who appear to have difficulty. Low scores could occur for a variety of reasons. Any reason bears investigation, whether it be test anxiety, the need for an eye examination, or any other reason including a need for upgraded reading skills.

I have enjoyed working with you and your group. They are a delightful mix of people with a real sense of camaraderie.

If you have any questions regarding the test results or procedures, or any other information which I can provide, please don't hesitate to call.

Sincerely,

Diana D. Atkinson

APPENDIX H

CORRESPONDENCE FROM THE ADULT
PERFORMANCE LEVEL PROJECT,
AUSTIN, TEXAS



COLLEGE OF EDUCATION

THE UNIVERSITY OF TEXAS AT AUSTIN

Adult Performance Level Project • Education Annex 2.212 • Austin, Texas 78712 • (512) 471-4623

April 24, 1987

Diana Connery
6801 E. 73rd
Tulsa, OK 74133

Dear Ms. Connery:

Thank you for your telephone call requesting information on APL literacy assessment instruments and activities. I am enclosing the APL JILL assessment and information on a number of other measures of functional literacy.

Camilla Secrest, Cleveland County PIC, uses the JILL and has found it an effective starting point. You may contact her at the following address: 601 N. Porter, Norman, Oklahoma 73071.

If we can be of further assistance, please let us know.

Sincerely,

Mina Rathbun
Senior Office Assistant

Enclosures

VITA

Diana D. Atkinson

Candidate for the Degree of

Master of Science

Thesis: THE CREATION OF A JOB-SPECIFIC SCREENING INSTRUMENT
TO DETECT WORKPLACE ILLITERACY

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Springfield, Ohio, July 6,
1947, the daughter of Marion L. and Edna Mae
Mason.

Education: Graduated from Springfield South High
School, Springfield, Ohio, in June, 1965;
received a Bachelor of Science Degree in
Education from the Ohio State University,
Columbus, Ohio, in December, 1967; completed
requirements for the Master of Science Degree at
Oklahoma State University in May, 1989.

Professional Experience: Public School Teacher, Ohio,
Illinois, Virginia, and Oklahoma, 1968 through
1982. President of Micro Resources, Inc., an
adult training organization from 1986 to 1989.
Director, Literacy Project, Metropolitan Tulsa
Chamber of Commerce and the Private Industry
Training Council, Tulsa, Oklahoma, present.